World Obesity Atlas 2024

Obesity and its consequences

• Global, regional and national estimates of the contribution of obesity to leading non-communicable diseases in adults
• Global, regional and national predictions of the effects of obesity on children’s higher risk of non-communicable diseases
• 186 national scorecards for child and adult obesity and its consequences

March 2024
# Contents

- **List of tables and figures**  
  4
- **Foreword**  
  6
- **Voices of people living with obesity**  
  7
- **Headline findings in the World Obesity Atlas 2024**  
  8
- **Section 1: Global overweight and obesity (high BMI)**  
  10
  - High BMI and the risk of non-communicable diseases in adults  
    10
  - Early signs of non-communicable diseases in childhood  
    14
  - Obesity and the health of the planet  
    17
- **Section 2. High BMI and the risk of non-communicable disease in adults:**  
  Analyses of numbers and trends by WHO regions and World Bank income groups  
  24
  - WHO regional data  
    24
  - World Bank income groups  
    27
- **Section 3. High BMI and the risk of non-communicable disease in childhood:**  
  Analyses of numbers and trends by WHO regions and World Bank income groups  
  32
  - WHO regional data  
    32
  - World Bank income group data  
    34
- **Section 4. Accelerating action on Obesity: catalysing a multi-sectoral approach**  
  38
- **Section 5: Country scorecards**  
  41
- **Annex 1: Sources of data**  
  230
- **Annex 2: Comparison of LMICs with High income countries**  
  234
List of tables and figures

Tables

Table 1.1: Global estimate (2020) and projected number of adults (2025-2035) with high BMI
Table 1.2: Top 20 countries for the highest proportion of adult men and women living with high BMI 2020
Table 1.3: Top 20 countries for the most rapid increase in the proportion of adults living with high BMI 2000-2016
Table 1.4: Deaths of adults attributable to high BMI (millions)
Table 1.5: Adult person-years lost to disease (DALYs) attributable to high BMI (millions)
Table 1.6: Global estimate (2020) and projected number of young people (2025-2035) with overweight (BMI >1sd – 2sd) and obesity (BMI >2sd)
Table 1.7: Top 20 countries for the highest proportion of children living with high BMI 2020
Table 1.8: Top 20 countries for the most rapid increase in the proportion of children living with high BMI 2000-2016
Table 1.9: Global estimate: Number of cases of young people with early signs of non-communicable disease, estimate for 2020
Table 1.10: Correlations between GDP per capita, GDP annual growth, adult and child high BMI prevalence and the annual change in prevalence, 2000-2016
Table 1.11: Correlations between adult and child high BMI and environmental indicators
Table 2.1: Adult overweight and obesity 2020-2035, WHO regions
Table 2.2: Deaths of adults and the numbers and proportions attributable to high BMI, WHO regions
Table 2.3: Adult person-years lost to disease (DALYs) attributable to high BMI, WHO regions
Table 2.4: Adult overweight and obesity 2020-2035, World Bank income groups
Table 2.5: Deaths of adults attributable to high BMI, World Bank income groups
Table 2.6: Adult person-years lost to disease (DALYs) attributable to high BMI, World Bank income groups
Table 3.1: Child overweight and obesity 2020-2035, WHO regions
Table 3.2: Child overweight and obesity 2020-2035, World Bank income groups

Figures

Figure 1.1: High BMI as a contributor (in %) to deaths from leading NCDs: adults 1990-2019
Figure 1.2: High BMI as a contributor (in %) to the years of healthy life lost (DALYs) to leading NCDs: adults 1990-2019
Figure 1.3: Projected numbers of children with NCD risks attributable to high BMI
Figure 1.4: Correlation between adult BMI and annual GHG emissions per capita
Figure 1.5: Correlation between adult BMI and annual plastic waste per capita

Figure 2.1: Proportion (%) of deaths from leading NCDs attributable to high BMI

Figure 2.2: Proportion (%) of person-years lost to disease (DALYs) for leading NCDs attributable to high BMI: WHO regions

Figure 2.3: Proportion (%) of adult deaths from leading NCDs attributable to high BMI: World Bank income groups

Figure 2.4: Proportion (%) of adult DALYs from leading NCDs attributable to high BMI: World Bank income groups

Figure 3.1: Numbers of children (millions) with low HDL cholesterol attributable to high BMI 2020-2035, WHO regions

Figure 3.2: Numbers of children (millions) with high blood pressure attributable to high BMI 2020-2035, WHO regions

Figure 3.3: Numbers of children (millions) with hyperglycaemia attributable to high BMI 2020-2035, WHO regions

Figure 3.4: Numbers of children (millions) with low HDL cholesterol attributable to high BMI 2020-2035, World Bank income groups

Figure 3.5: Numbers of children (millions) with high blood pressure attributable to high BMI 2020-2035, World Bank income groups

Figure 3.6: Numbers of children (millions) with hyperglycaemia attributable to high BMI 2020-2035, World Bank income groups

Boxes

Box 1: Definition of overweight, obesity, high BMI

Box 2: Obesity in climate-vulnerable countries

Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRO</td>
<td>African Region</td>
</tr>
<tr>
<td>BMI</td>
<td>Body Mass Index</td>
</tr>
<tr>
<td>DALY</td>
<td>Disability-Adjusted Life-Years</td>
</tr>
<tr>
<td>EMRO</td>
<td>Eastern Mediterranean Region</td>
</tr>
<tr>
<td>EURO</td>
<td>European Region</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse Gas</td>
</tr>
<tr>
<td>HDL</td>
<td>High-Density Lipoprotein</td>
</tr>
<tr>
<td>IHME</td>
<td>Institute for Health Metrics and Evaluation</td>
</tr>
<tr>
<td>LMIC</td>
<td>Low Middle Income Countries</td>
</tr>
<tr>
<td>NCD</td>
<td>Non-Communicable Disease</td>
</tr>
<tr>
<td>PAHO</td>
<td>Region of the Americas</td>
</tr>
<tr>
<td>SD</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>SEARO</td>
<td>South-East Asia Region</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WPRO</td>
<td>Western Pacific Region</td>
</tr>
</tbody>
</table>
World Obesity Day 2024 sees the publication of the sixth World Obesity Atlas. Each Atlas has reported estimates for national obesity prevalence levels and trends, and each has also focused on a theme: these include the rise in childhood obesity, the likelihood of meeting global targets, the impact of obesity on COVID-19 risk, and the economic impact of overweight and obesity.

This year the theme is “Obesity and...” the diseases it drives, with specific focus on obesity as a preventable cause of non-communicable diseases (NCDs). We look at major NCDs (type II diabetes, stroke, coronary heart disease, and cancer) and the proportions of these diseases that are attributable to high body mass index (overweight and obesity) in adulthood. To further illustrate obesity’s role in wider NCD challenges that are occurring at ever-younger ages, we also provide estimates of the numbers of children with the early signs of NCDs (hyperglycaemia, high blood pressure, and low HDL cholesterol), and the proportion of these attributable to high body mass index. We also estimate the numbers of children who might be spared from developing these conditions if they were not experiencing excess body weight.

We then take a brief look at the role planetary health and the changing climate are playing in the development and degree of overweight and obesity, recognising the associations between economic development and the changing nature of food supplies, transport, urbanisation and pollution. While obesity has been recognised as a disease, its rapid increase in recent years has been exacerbated by some of the drivers of rapid economic growth. Efforts to address obesity and climate change share many common obstacles including siloed, fragmented, and insufficiently resourced approaches when comprehensive, integrated, and well-supported efforts are the only way to achieve long-term success and impact.

This focus also underscores a critical finding of the Atlas: the countries where disability and death attributable to overweight and obesity are highest are in the Eastern Mediterranean including North Africa, the Americas and South-East Asia. This further dismantles misconceptions that obesity is limited to wealthier and older populations in the Global North, and is easily prevented and managed by calling on individuals to eat less and move more. Our Atlas demonstrates that obesity is global, affecting rich and poor, at ever younger ages. Preventing, detecting and managing obesity could be seen as the single most important way to reduce premature deaths due to cancer, cardiovascular disease and diabetes, the main causes of death the world over. By taking this on, we can improve the health of the population and the planet.

The Atlas is completed by a series of national scorecards for 186 countries, presenting our data for overweight and non-communicable disease based on current estimates and projected for young people to 2035. These serve as a wealth of evidence for advocacy directed at policymakers who have the power to make a difference.
Voices of people living with obesity

Living with obesity can impact your life in many ways, especially if you are a child or teenager who is the target of jokes and teasing because of your weight. I have kept my weight under control for over six years, and I believe that a key factor enabling me to do this is knowing that obesity is a disease that must be managed every day. For this to happen, it is very important to take care of the environment in which I live and to accept that there will still be moments of ups and downs along the way. Don’t give up!

Gabriel Chamon, Youth

The environment around us influences our choices, so let’s talk about our food systems, our parks, public spaces, and the workplace. Living with obesity also shapes our world and to lead the healthiest life possible, we need supporting environments: safe spaces free from stigma, real science-based information free from diet gurus and influencers, and health systems that are prepared for the obesity epidemic. Picture community gardens where children learn to grow fruits and vegetables, connecting with the earth and understanding the value of healthy eating. Envision cities designed with green spaces where families can play and exercise together, free from pollution. These are not just dreams; they are achievable goals. Together, we can advocate for policies that support these initiatives, reducing obesity by creating environments that promote physical activity and provide nutritious food choices for all. Let’s transform our world into a healthier place, step by step, starting today.

Dr María Eugenia Anselmi, Our World

I was born with childhood obesity. This March 4 on World Obesity Day, we are talking about obesity and various health topics. Did you know that one out of every seven individuals around you is living with obesity? That equals 1 billion people globally living with obesity. And obesity is a complex disease caused by both behavioural, genetic and environmental factors. This is an important point to understand to ensure that when we work and interact with people living with obesity, we are not blaming them for bringing obesity onto themselves.

Stephen Ogweno, Health
Headline findings in the World Obesity Atlas 2024

Of the 41 million deaths each year due to NCDs, 5 million are driven by high BMI (≥ 25 kg/m²). Nearly 4 million of these are from diabetes, stroke, coronary heart disease and cancer alone. A high BMI is responsible for over 120 million person-years lost to these four leading NCDs each year. Three quarters of this avoidable death and disease in adults is occurring in middle-income countries. Put simply, most people living with and dying from NCDs have underlying high BMI, and the majority of these NCD deaths are occurring among people in lower resource settings and developing countries.

On present trends, by 2035 more than 750 million children (age 5-19 years) are expected to be living with overweight and obesity as measured by body mass. That is equivalent to two children in every five globally, and most of these children will be living in middle-income countries.

Because of their high BMI, these 750 million children are at higher risk of experiencing the early signs of non-communicable diseases while still in childhood. In 2035, an estimated 68 million children will be suffering from high blood pressure due to their high BMI, an estimated 27 million will be living with hyperglycaemia due to their high BMI, and 76 million will have low HDL cholesterol due to their high BMI. The symptoms of these precursors to serious disease are largely invisible, but the children will be entering adulthood already on track for strokes, diabetes and heart disease. Despite some laudable efforts to address this, without major and coordinated action, rates of obesity will continue to rise, and more and more people will die prematurely from obesity or one of the diseases attributable to obesity. Moreover, the NCDs associated with obesity that were once only seen in adults are now becoming increasingly common among children.

To reinforce how much this has become an issue of emerging and more recently developed economies, the Atlas also shows the correlation between high BMI and economic development. Countries with economies that are expanding at an accelerated rate also have rapid rises in the prevalence of overweight, albeit from a low level. The data shows how high BMI is linked to the mounting environmental crisis facing the globe, with greenhouse gas emissions, urbanisation, plastic waste, a lack of physical activity and consumption of animal products all playing a role in creating unhealthy environments that contribute to obesity.

Reducing obesity prevalence and improving its management will have substantial benefits for health services and improve the likelihood of meeting global targets for tackling NCDs in adults. This will ensure better health for future generations.

---

**Box 1: Definition of overweight, obesity, high BMI**

In adults, overweight and obesity are defined as a BMI ≥25 kg/m². In children, overweight and obesity are defined as a BMI >1sd above the WHO median child reference values. Both overweight and obesity in adults and children are referred to as high BMI throughout the document.

Although widely used, BMI has well documented limitations. As a measure of size not health, it is useful as a screening tool at the individual level and for estimating overweight and obesity at a population level. It is not recommended that it be used in isolation as a diagnostic tool in a clinical setting.
Section 1: Global overweight and obesity (high BMI)
Section 1: Global overweight and obesity (high BMI)

Every country is affected by high BMI, with some lower income countries showing the highest increases in the last decade. As reported in the World Obesity Atlas 2023 (World Obesity Federation, 2023a), preventing and treating obesity may require financial investment, but the cost of failing to prevent and treat obesity will be far higher, with high BMI reducing the global economy by over US$4 trillion in 2035, nearly 3% of global gross domestic product.

The estimates for global levels of high BMI suggest that nearly 3.3 billion adults may be affected by 2035, compared with 2.2 billion in 2020. This reflects an increase from 42% of adults in 2020 to over 54% by 2035. For young people aged 5 to 19 years, the figure rises from 22% experiencing high BMI (430 million) to over 39% (770 million) by 2035.

High BMI and the risk of non-communicable diseases in adults

Based on data trends for 2000-2016, and assuming no interventions, the projected rise in the prevalence and numbers of adults with high BMI is shown in Table 1.1.

Table 1.1: Global estimate (2020) and projected number of adults (2025-2035) with high BMI

<table>
<thead>
<tr>
<th>Adults with overweight (BMI ≥25 to 30 kg/m²)</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults with obesity (BMI ≥30 kg/m²)</td>
<td>0.81bn</td>
<td>1.01bn</td>
<td>1.25bn</td>
<td>1.53bn</td>
</tr>
<tr>
<td>Adults with overweight or obesity as a proportion of all adults globally</td>
<td>42%</td>
<td>46%</td>
<td>50%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Source: World Obesity Federation, 2023b

For regional data see sections 2 and 3.

Table 1.2: Top 20 countries for the highest proportion of adult men and women living with high BMI 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Proportion of men with high BMI</th>
<th>Proportion of women with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonga</td>
<td>80%</td>
<td>Tonga</td>
</tr>
<tr>
<td>Samoa</td>
<td>79%</td>
<td>Samoa</td>
</tr>
<tr>
<td>United States</td>
<td>79%</td>
<td>Kuwait</td>
</tr>
<tr>
<td>Malta</td>
<td>78%</td>
<td>Jordan</td>
</tr>
<tr>
<td>Kuwait</td>
<td>77%</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>New Zealand</td>
<td>76%</td>
<td>Qatar</td>
</tr>
<tr>
<td>Australia</td>
<td>76%</td>
<td>Turkey</td>
</tr>
<tr>
<td>Israel</td>
<td>76%</td>
<td>Libya</td>
</tr>
<tr>
<td>Country</td>
<td>Proportion of men with high BMI</td>
<td>Proportion of women with high BMI</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Qatar</td>
<td>76%</td>
<td>Lebanon</td>
</tr>
<tr>
<td>Canada</td>
<td>76%</td>
<td>Oman</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>75%</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>Spain</td>
<td>74%</td>
<td>Egypt</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>74%</td>
<td>Bahamas</td>
</tr>
<tr>
<td>Jordan</td>
<td>74%</td>
<td>Fiji</td>
</tr>
<tr>
<td>Czechia</td>
<td>74%</td>
<td>Iraq</td>
</tr>
<tr>
<td>Greece</td>
<td>74%</td>
<td>Algeria</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>73%</td>
<td>Tunisia</td>
</tr>
<tr>
<td>Lebanon</td>
<td>73%</td>
<td>Bahrain</td>
</tr>
<tr>
<td>Iceland</td>
<td>73%</td>
<td>Iran</td>
</tr>
<tr>
<td>Montenegro</td>
<td>73%</td>
<td>Mexico</td>
</tr>
</tbody>
</table>

Source: World Obesity Federation, 2023b

Table 1.3: Top 20 countries for the most rapid increase in the proportion of adults living with high BMI 2000-2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Compound annual growth in adult obesity 2000-2016 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>3.8</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>3.8</td>
</tr>
<tr>
<td>Maldives</td>
<td>3.7</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.5</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>3.5</td>
</tr>
<tr>
<td>Bhutan</td>
<td>3.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.4</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>3.3</td>
</tr>
<tr>
<td>Nepal</td>
<td>3.2</td>
</tr>
<tr>
<td>Myanmar</td>
<td>3.2</td>
</tr>
<tr>
<td>India</td>
<td>3.1</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>3.1</td>
</tr>
<tr>
<td>Cambodia</td>
<td>3.1</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>3.0</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>3.0</td>
</tr>
<tr>
<td>Rwanda</td>
<td>2.9</td>
</tr>
<tr>
<td>Pakistan</td>
<td>2.8</td>
</tr>
</tbody>
</table>
According to the 2024 Global Burden of Disease study (IHME, 2024) recent estimates indicate that over 56 million people (adults and children) die each year, and 2.5 billion years of healthy life are lost to disease or injuries or other causes of ill-health (DALYs, or disability-adjusted life-years). Of these, some 42 million deaths and 1.6 billion DALYs are caused by non-communicable diseases (NCDs). Two-thirds of these NCD deaths and 40% of the NCD DALYs are caused by just four conditions: cancers (neoplasms), coronary heart disease, stroke and diabetes. Each of these conditions is associated with, and accelerated by, overweight and obesity.

The Global Burden of Disease study has also provided estimates of the proportion of these deaths and DALYs for which risk factors are known, including the risk factor of a high body mass index (BMI ≥25 kg/m²). As shown in Tables 1.4 and 1.5, a high BMI accounts for between 5% and 42% of adult deaths from the four leading NCDs, and between 5% and 52% of adult DALYs from these NCDs.

### Table 1.4: Deaths of adults attributable to high BMI (millions)

<table>
<thead>
<tr>
<th></th>
<th>Total deaths 2019</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>All causes</td>
<td>50.3m</td>
<td>5.0m (10%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>41.0m</td>
<td>5.0m (12%)</td>
</tr>
<tr>
<td>.....Diabetes mellitus (Type 2)</td>
<td>1.47m</td>
<td>0.62m (42%)</td>
</tr>
<tr>
<td>.....Coronary heart disease</td>
<td>9.1m</td>
<td>1.7m (19%)</td>
</tr>
<tr>
<td>.....Neoplasms</td>
<td>9.9m</td>
<td>0.46m (5%)</td>
</tr>
<tr>
<td>.....Stroke</td>
<td>6.5m</td>
<td>1.1m (17%)</td>
</tr>
</tbody>
</table>

Source: IHME, 2024
### Table 1.5: Adult person-years lost to disease (DALYs) attributable to high BMI (millions)

<table>
<thead>
<tr>
<th></th>
<th>Total DALYs 2019</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>All causes</td>
<td>1,871m</td>
<td>160m (9%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>1,454m</td>
<td>160m (11%)</td>
</tr>
<tr>
<td>Of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes mellitus (Type 2)</td>
<td>66.1m</td>
<td>34.4m (52%)</td>
</tr>
<tr>
<td>coronary heart disease</td>
<td>181m</td>
<td>41.4m (23%)</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>241m</td>
<td>11.2m (5%)</td>
</tr>
<tr>
<td>Stroke</td>
<td>141m</td>
<td>34.8m (25%)</td>
</tr>
</tbody>
</table>

*Source: IHME, 2024*

The importance of a high BMI as a contributory risk to major NCDs has gradually increased relative to other known risk factors in the last two decades. This is considered to be due, in part, to a decline in the contribution of other risk factors such as poor interior air or use of tobacco products, but also in part due to the increasing evidence of the influence of overweight on a range of diseases and its effects in younger age groups. The trends are reflected in all four of the leading NCDs considered in this Atlas, as shown in Figures 1.1 and 1.2 below.

### Figure 1.1: High BMI as a contributor (in %) to deaths from leading NCDs: adults 1990-2019

*Source: World Obesity Federation analysis from IHME, 2024*
Figure 1.2: High BMI as a contributor (in %) to the years of healthy life lost (DALYs) to leading NCDs: adults 1990-2019

Source: World Obesity Federation analysis from IHME, 2024

Early signs of non-communicable diseases in childhood

Based on data trends for 2000-2016, and assuming no interventions, the prevalence and numbers of young people (aged 5-19 years) with overweight or obesity is predicted to rise from over 430m young people (22% of the global population of this age group) to 770m (39%) by 2035 – see Table 1.6.

Table 1.6: Global estimate (2020) and projected number of young people (2025-2035) with overweight (BMI >1sd – 2sd)* and obesity (BMI >2sd)*

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children with overweight</td>
<td>260m</td>
<td>310m</td>
<td>350m</td>
<td>390m</td>
</tr>
<tr>
<td>Children with obesity</td>
<td>175m</td>
<td>240m</td>
<td>310m</td>
<td>380m</td>
</tr>
<tr>
<td>Children with overweight or obesity as a proportion of all children globally</td>
<td>22%</td>
<td>28%</td>
<td>33%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Source World Obesity Federation, 2023a

For regional data see sections 2 and 3.

* Definitions according to World Health Organization child growth reference charts.
### Table 1.7: Top 20 countries for the highest proportion of children living with high BMI 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Proportion of boys with high BMI</th>
<th>Proportion of girls with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonga</td>
<td>63%</td>
<td>Tonga</td>
</tr>
<tr>
<td>Samoa</td>
<td>57%</td>
<td>Samoa</td>
</tr>
<tr>
<td>United States</td>
<td>51%</td>
<td>Fiji</td>
</tr>
<tr>
<td>Kuwait</td>
<td>50%</td>
<td>United States</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>46%</td>
<td>Kuwait</td>
</tr>
<tr>
<td>China</td>
<td>46%</td>
<td>Vanuatu</td>
</tr>
<tr>
<td>Greece</td>
<td>46%</td>
<td>Egypt</td>
</tr>
<tr>
<td>Qatar</td>
<td>46%</td>
<td>New Zealand</td>
</tr>
<tr>
<td>Oman</td>
<td>45%</td>
<td>El Salvador</td>
</tr>
<tr>
<td>Cyprus</td>
<td>45%</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>Argentina</td>
<td>45%</td>
<td>Mexico</td>
</tr>
<tr>
<td>New Zealand</td>
<td>45%</td>
<td>Bahamas</td>
</tr>
<tr>
<td>Lebanon</td>
<td>44%</td>
<td>Oman</td>
</tr>
<tr>
<td>Italy</td>
<td>44%</td>
<td>Saudi Arabia</td>
</tr>
<tr>
<td>Malta</td>
<td>43%</td>
<td>Portugal</td>
</tr>
<tr>
<td>Egypt</td>
<td>43%</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Mexico</td>
<td>42%</td>
<td>Qatar</td>
</tr>
<tr>
<td>Portugal</td>
<td>42%</td>
<td>Jordan</td>
</tr>
<tr>
<td>Bahamas</td>
<td>42%</td>
<td>Algeria</td>
</tr>
<tr>
<td>Spain</td>
<td>42%</td>
<td>Panama</td>
</tr>
</tbody>
</table>

*Source: World Obesity Federation, 2023b*

### Table 1.8: Top 20 countries for the most rapid increase in the proportion of children living with high BMI 2000-2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Compound annual growth in child obesity 2000-2016 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viet Nam</td>
<td>10.0</td>
</tr>
<tr>
<td>South Africa</td>
<td>9.1</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>8.1</td>
</tr>
<tr>
<td>India</td>
<td>7.9</td>
</tr>
<tr>
<td>Maldives</td>
<td>7.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>7.8</td>
</tr>
<tr>
<td>Nepal</td>
<td>7.7</td>
</tr>
</tbody>
</table>
Early signs of the development of non-communicable diseases include high blood pressure, a major risk factor for cardiovascular disease and especially strokes, and hyperglycaemia or poor glucose tolerance, indicating early signs of type 2 diabetes. We also consider the levels of high-density lipoprotein (HDL) cholesterol in blood, as this form of circulating cholesterol is protective of heart health, and low levels of HDL cholesterol are an early warning sign for coronary heart disease.

On the basis of the known prevalence of these three early signs of NCDs in young people in different BMI categories, we can estimate the likely number of cases in the population (for our methods see Annex 1: Sources of data). We can also compare this with the number of cases that might be found if all children had a BMI below the WHO reference for overweight (i.e. BMI < 1sd above the median) – see Table 1.9.

Table 1.9: Global estimate: Number of cases of young people with early signs of non-communicable disease, estimate for 2020

<table>
<thead>
<tr>
<th></th>
<th>Cases of low HDL cholesterol</th>
<th>Cases of high blood pressure</th>
<th>Cases of hyperglycaemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not excess body weight</td>
<td>122m</td>
<td>47m</td>
<td>100m</td>
</tr>
<tr>
<td>Overweight (1sd - 2sd)</td>
<td>41m</td>
<td>17m</td>
<td>25m</td>
</tr>
<tr>
<td>Obesity (&gt;2sd)</td>
<td>36m</td>
<td>31m</td>
<td>18m</td>
</tr>
<tr>
<td><strong>Total cases</strong></td>
<td><strong>199m</strong></td>
<td><strong>95m</strong></td>
<td><strong>143m</strong></td>
</tr>
<tr>
<td>Cases if all children not overweight (&lt;1sd)</td>
<td>157m</td>
<td>60m</td>
<td>128m</td>
</tr>
<tr>
<td>Cases attributable to excess body weight</td>
<td>41m</td>
<td>34m</td>
<td>15m</td>
</tr>
</tbody>
</table>

Source: World Obesity Federation analysis of IHME, 2024
With the numbers of children experiencing overweight and obesity projected to 2035 we can estimate the numbers of cases of young people carrying these early signs of NCDs that are attributable to overweight and obesity. The results are shown in Figure 1.3.

The estimates suggest that, in 2035 and assuming no interventions to reduce overweight and obesity, some 27 million children will experience hyperglycaemia, 69 million will experience high blood pressure, and 76 million will experience low levels of HDL cholesterol, all attributable to their high BMI. Most of these children will be in middle-income countries, and for the most part their conditions will not be detected or treated.

Figure 1.3: Projected numbers of children with NCD risks attributable to high BMI.

NB: Children with high BMI may experience more than one of the early signs of disease.

Obesity and the health of the planet

The World Obesity Atlas 2024 has a main theme of obesity as a preventable cause of non-communicable diseases. In this section, we look at additional correlates of obesity and their relationship to planetary health.

The relationship between high body mass and planetary health is two-directional, with climate change and its causes contributing to increased obesity levels, while on a population level some evidence suggests that the needs of a growing population with a high BMI will increase greenhouse gas (GHG) emissions, by small margins compared to other sources of emissions (Swinburn et al, 2019).

The growth of economies and societies is closely associated with an increasing proportion of the population living with a high BMI. The World Obesity Atlas 2021 (World Obesity Federation, 2021) noted the correlation between countries’ levels of GDP per capita and the prevalence of obesity. For the present Atlas, we have re-analysed the
available data for comparable years from the World Bank (2000-2016) (World Bank, 2024a) and NCD RisC (2000-2016) (NCD RisC, 2024) in order to examine the rate of increase in GDP in the last two decades, and the rate of increase in the prevalence of high BMI (defined for adults as a BMI ≥ 25 kg/m² and for children as a BMI >1sd above reference).

Table 1.10: Correlations between GDP per capita, GDP annual growth, adult and child high BMI prevalence and the annual change in prevalence, 2000-2016

<table>
<thead>
<tr>
<th></th>
<th>GDP per capita 2016 (n=182)</th>
<th>Annualised growth in GDP per capita 2000-2016 (n=178)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult high BMI prevalence 2016</td>
<td>r= 0.41 (p&lt;0.001)</td>
<td>r= -0.24 (p&lt;0.005)</td>
</tr>
<tr>
<td>Annualised increase in adult high BMI prevalence 2000-2016</td>
<td>r= -0.50 (p&lt;0.001)</td>
<td>r= 0.26 (p&lt;0.001)</td>
</tr>
<tr>
<td>Child high BMI prevalence 2016</td>
<td>r= 0.35 (p&lt;0.001)</td>
<td>r= -0.30 (p&lt;0.001)</td>
</tr>
<tr>
<td>Annualised increase in child high BMI prevalence 2000-2016</td>
<td>r= -0.61 (p&lt;0.001)</td>
<td>r= 0.34 (p&lt;0.001)</td>
</tr>
<tr>
<td>GDP per capita 2016</td>
<td></td>
<td>r= -0.22 (p&lt;0.005)</td>
</tr>
</tbody>
</table>

Sources: World Obesity Federation analysis of NCD RisC, 2024 and World Bank, 2024a

The results confirm the general association between higher GDP per capita and higher prevalence of high BMI among both adults and children. They also show a positive correlation between annualised growth in GDP per capita and annualised increase in the prevalence of high BMI, for both adults and children. However, countries with the most rapid growth in GDP are generally those starting from a low level, and that is supported by the inverse relationship (negative correlation) between current GDP and the rate of increase in obesity levels, for both adults and children. Conversely, the most rapid increase in overweight and obesity tends to be in countries starting from a low level, so we find a positive relationship between the most rapid increases in high BMI for both children and adults and the rate of increase in GDP.

In summary, high BMI prevalence for both adults and children is positively correlated with the economic performance of a country (as far as can be measured by GDP). This can be stated while recognising that any wealth generated by improved economic performance is often not shared by all and that may indeed be exacerbating inequities. The data also reveal that those countries showing the most rapid growth in wealth will likely also show a rapid rise in the prevalence of high BMI, albeit from low levels.

It follows that the environmental consequences of rising economic wealth are expected to be linked (positively correlated) to the prevalence of high BMI. This can be shown in terms of the use of fossil fuels and greenhouse gas (GHG) emissions, and in the proportion of a nation’s population living in urban areas. All of these have implications for the development of high BMI, through the use of mechanised industrial processes, sedentary working practices, use of motorised transport and less need and opportunity for active transport and active recreation.

Similarly, more people living in cities tends to be associated with greater availability of processed foods in the food supply, and increased use of food packaging including wrapping and bottling using plastic products.
Furthermore, increased processed food supplies and increased national wealth are reflected in national dietary patterns, with countries experiencing high GDP levels also likely to shift to diets containing greater levels of animal proteins and processed sugar-containing foods. Moreover, people living with a high BMI are predisposed to maintain metabolism, body heat and movement through greater intake of food energy, and this increased consumption can be shown at a national population level. These environmental issues can be shown to correlate with the prevalence of high BMI in a population as shown in Table 1.11 and Figures 1.4 and 1.5.

In simple terms, the data show that with increased national wealth (i.e. increased GDP) we see increased levels of high BMI. We also see a similar correlation between high BMI and GHG emissions, increased urban population, plastic waste usage, insufficient inactivity, and the consumption of animal proteins, sugars and sweeteners – mainly adverse consequences of economic wealth. This highlights the challenge faced by lower- and middle-income countries which are indeed seeing rising levels of obesity.

### Table 1.11: Correlations between adult and child high BMI and environmental indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult high BMI prevalence 2016</td>
<td>r= 0.48 (p&lt;0.001)</td>
<td>r= 0.57 (p&lt;0.001)</td>
<td>r= 0.45 (p&lt;0.001)</td>
<td>r= 0.48 (p&lt;0.001)</td>
<td>r= -0.19 (p&lt;0.05)</td>
<td>r= 0.67 (p&lt;0.001)</td>
<td>r= 0.49 (p&lt;0.001)</td>
</tr>
<tr>
<td>Child high BMI prevalence 2016</td>
<td>r= 0.54 (p&lt;0.001)</td>
<td>r= 0.47 (p&lt;0.001)</td>
<td>r= 0.46 (p&lt;0.001)</td>
<td>r= 0.49 (p&lt;0.001)</td>
<td>r= -0.07 (ns)</td>
<td>r= 0.61 (p&lt;0.001)</td>
<td>r= 0.44 (p&lt;0.001)</td>
</tr>
</tbody>
</table>

ns = not significant

Sources: See Annex 1
Figure 1.4: Correlation between adult BMI and annual GHG emissions per capita


Figure 1.5: Correlation between adult BMI and annual plastic waste per capita

Source: World Obesity Federation analysis using data from NCD RisC, 2024 and World Bank, 2023b
In modern food systems, more than 3 kcal of fossil fuel energy is required to produce 1 kcal of food energy (Hall et al., 2009). As noted above, high body mass implies a greater need for food energy which in turn creates a greater consumption of food products (10%-30% greater energy intake) (Prentice et al., 1996) and greater fuel consumption when motorised transport is used (Hammond and Levine, 2010). The amounts are not trivial, with one estimate suggesting that high BMI adds an extra 700 megatons of greenhouse gas (CO₂ equivalent) emissions annually - the equivalent of 1.6% of worldwide GHG emissions (Magkos et al., 2020).

Care should be taken not to focus responsibility for these effects on the environment on individual consumers, and in particular, to avoid stigmatising individuals living with high BMI. An individual's increase in body mass index is a consequence of larger system effects, especially systems that are structured to incentivise high levels of consumption of food and fossil fuel, along with trends towards sedentary behaviour in the workplace and at home. In particular, food and beverage companies have a specific interest in rising levels of high BMI among adults and children: the excess food energy consumed to maintain metabolism. The additional consumption for children in the USA alone is estimated to be worth over $20bn in food and beverage sales each year (Lobstein et al., 2015) and far more for adults in the USA, and an order of magnitude greater worldwide.

As noted in the 2019 Lancet Commission on Obesity report (Swinburn et al., 2019), the food system is driving unprecedented environmental damage, accounting for 29% of human-caused greenhouse gas emissions and causing rapid deforestation, soil degradation and massive biodiversity loss. Meat production is at the centre of these costs, and, as shown earlier, animal protein consumption is closely associated with obesity prevalence at national levels.

In the World Obesity Atlas 2022 (World Obesity Federation, 2022), we noted globally successful food and beverage companies operate in a highly competitive market and may pursue models of production and market expansion which harm the health of both people and planet - through, for example, intensive marketing and promotion of unhealthy food produced in an unsustainable and environmentally damaging way. This has been recognised in a large number of reports on the global impact of current food systems, most recently with the report on the need for food system transformation (Food System Economic Commission, 2024) which points out “the recent evolution of food systems has fuelled – and continues to inflame – some of the greatest and gravest challenges facing humanity, notably persistent hunger, undernutrition, the obesity epidemic, loss of biodiversity, environmental damage and climate change. The economic value of this human suffering and planetary harm is well above 10 trillion USD a year, more than food systems contribute to global GDP. In short, our food systems are destroying more value than they create.” (page 7)

As a recent Lancet editorial commented, “Obesity is a product of not only an individual's circumstances and behaviour, but also society at large, shaped by global food markets and trade agreements. Multidimensional approaches are needed to curb the effects of the obesogenic environment, particularly against an international industry that promotes overproduction of cheap food and drinks.” (Lancet editorial, 2024). To this we would add the neglect of obesity within health systems, along with lack of consistent data, stigma and fragmented policy approaches.

In order to protect the health of the planet and its citizens, there is an urgent need for a realignment of priorities. Instead of competitive market economics which require cost reduction, long shelf-lives, mass production and ever-increasing sales expansion dictating what is and is not produced, we need to be guided by what sustains our planet and our bodies. And in order to protect people from developing and dying from NCDs including several types of cancer and diabetes, we need to address and manage overweight and obesity in health systems. For this, policies and incentives are needed to protect consumers, health systems and societies more broadly.
BOX 2: Obesity in climate-vulnerable countries

The effects of climate change are not felt evenly by countries. It is notable that some of the most climate-vulnerable countries, such as Small Island Developing States (SIDS), are also countries that report high prevalence of obesity (e.g. the Pacific Island countries). These countries are therefore extremely vulnerable both to further planetary degradation, and the impact of overweight and obesity, putting their resilience to economic, social and climate crises at risk. Both epidemics, of climate and obesity, are to have the greatest impact on developing nations, and need to be viewed intrinsically together as a development issue to deliver efforts in joint solutions for the benefit of the planet and people.
Section 2: High BMI and the risk of non-communicable disease in adults: Analyses of numbers and trends by WHO regions and World Bank income groups
Section 2. High BMI and the risk of non-communicable disease in adults: Analyses of numbers and trends by WHO regions and World Bank income groups

This section considers the distribution of high BMI according to WHO region and according to World Bank income group, and the deaths and lost healthy life-years (DALYs) caused by non-communicable disease attributable to high BMI.

WHO regional data

Overweight and obesity trends 2020 to 2035

This section considers the numbers of adults estimated to experience overweight (excluding obesity, i.e. BMI ≥25 to 30 kg/m²) and obesity (BMI ≥ 30 kg/m²) in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends.

Table 2.1 Adult overweight and obesity 2020-2035, WHO regions

<table>
<thead>
<tr>
<th>Region</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>African region (AFRO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with overweight (millions)</td>
<td>118.28</td>
<td>143.51</td>
<td>172.80</td>
<td>204.43</td>
</tr>
<tr>
<td>Adults with obesity (millions)</td>
<td>68.39</td>
<td>94.72</td>
<td>131.78</td>
<td>182.00</td>
</tr>
<tr>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>35%</td>
<td>39%</td>
<td>43%</td>
<td>47%</td>
</tr>
<tr>
<td>Eastern Mediterranean region (EMRO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with overweight (millions)</td>
<td>111.58</td>
<td>123.25</td>
<td>135.48</td>
<td>147.75</td>
</tr>
<tr>
<td>Adults with obesity (millions)</td>
<td>105.60</td>
<td>133.68</td>
<td>168.98</td>
<td>211.99</td>
</tr>
<tr>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>51%</td>
<td>54%</td>
<td>57%</td>
<td>61%</td>
</tr>
<tr>
<td>European region (EURO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with overweight (millions)</td>
<td>256.85</td>
<td>255.11</td>
<td>251.67</td>
<td>246.11</td>
</tr>
<tr>
<td>Adults with obesity (millions)</td>
<td>191.08</td>
<td>212.73</td>
<td>236.88</td>
<td>263.15</td>
</tr>
<tr>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>63%</td>
<td>66%</td>
<td>68%</td>
<td>71%</td>
</tr>
<tr>
<td>Region of the Americas (PAHO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with overweight (millions)</td>
<td>238.10</td>
<td>245.40</td>
<td>247.55</td>
<td>243.84</td>
</tr>
<tr>
<td>Adults with obesity (millions)</td>
<td>246.32</td>
<td>292.55</td>
<td>342.87</td>
<td>394.55</td>
</tr>
<tr>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>67%</td>
<td>71%</td>
<td>74%</td>
<td>77%</td>
</tr>
</tbody>
</table>
Deaths attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of deaths in the WHO regions, and the proportion of these attributable to high BMI, shown in Table 2.2.

Table 2.2: Deaths of adults and the numbers and proportions attributable to high BMI, WHO regions

<table>
<thead>
<tr>
<th>Region</th>
<th>All causes</th>
<th>Of which non-communicable diseases</th>
<th>Total deaths 2019</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>All causes</td>
<td>50.3m</td>
<td>5.0m (10%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Of which non-communicable diseases</td>
<td>41.0m</td>
<td>5.0m (12%)</td>
<td></td>
</tr>
<tr>
<td>African region</td>
<td>All causes</td>
<td>4.7m</td>
<td>0.4m (8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Of which non-communicable diseases</td>
<td>2.5m</td>
<td>0.4m (15%)</td>
<td></td>
</tr>
<tr>
<td>Eastern Mediterranean region</td>
<td>All causes</td>
<td>3.2m</td>
<td>0.5m (16%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Of which non-communicable diseases</td>
<td>2.5m</td>
<td>0.5m (21%)</td>
<td></td>
</tr>
<tr>
<td>European region</td>
<td>All causes</td>
<td>9.3m</td>
<td>1.2m (13%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Of which non-communicable diseases</td>
<td>8.4m</td>
<td>1.2m (15%)</td>
<td></td>
</tr>
<tr>
<td>Region of the Americas</td>
<td>All causes</td>
<td>6.9m</td>
<td>0.9m (14%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Of which non-communicable diseases</td>
<td>5.9m</td>
<td>0.9m (16%)</td>
<td></td>
</tr>
<tr>
<td>South-East Asia region</td>
<td>All causes</td>
<td>12.0m</td>
<td>0.9m (8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Of which non-communicable diseases</td>
<td>9.0m</td>
<td>0.9m (10%)</td>
<td></td>
</tr>
<tr>
<td>Western Pacific region</td>
<td>All causes</td>
<td>14.1m</td>
<td>1.0m (7%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Of which non-communicable diseases</td>
<td>12.5m</td>
<td>1.0m (8%)</td>
<td></td>
</tr>
</tbody>
</table>

Source: IHME, 2024

For the four major NCDs the distribution across regions is shown in Figure 2.1.
Figure 2.1: Proportion (%) of deaths from leading NCDs attributable to high BMI

Source: IHME, 2024

Years of life lost to disease (DALYs) attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of healthy life-years lost to disease (DALYs) in the WHO regions, and the proportion of these attributable to high BMI, shown in Table 2.3.

Table 2.3: Adult person-years lost to disease (DALYs) attributable to high BMI, WHO regions

<table>
<thead>
<tr>
<th>Region</th>
<th>All causes</th>
<th>Of which non-communicable diseases</th>
<th>Total DALYs 2019</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>All causes</td>
<td>Of which non-communicable diseases</td>
<td>1,871m</td>
<td>160m (9%)</td>
</tr>
<tr>
<td>Africa region</td>
<td>All causes</td>
<td>Of which non-communicable diseases</td>
<td>213m</td>
<td>12m (5%)</td>
</tr>
<tr>
<td>Eastern Mediterranean region</td>
<td>All causes</td>
<td>Of which non-communicable diseases</td>
<td>143m</td>
<td>18m (13%)</td>
</tr>
<tr>
<td>European region</td>
<td>All causes</td>
<td>Of which non-communicable diseases</td>
<td>282m</td>
<td>32m (12%)</td>
</tr>
<tr>
<td>Region of the Americas</td>
<td>All causes</td>
<td>Of which non-communicable diseases</td>
<td>262m</td>
<td>30m (12%)</td>
</tr>
</tbody>
</table>
### World Obesity Atlas 2024

#### Total DALYs 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>Total DALYs 2019</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-East Asia region</td>
<td>490m</td>
<td>34m (7%)</td>
</tr>
<tr>
<td></td>
<td>360m</td>
<td>34m (9%)</td>
</tr>
<tr>
<td>Western Pacific region</td>
<td>477m</td>
<td>33m (7%)</td>
</tr>
<tr>
<td></td>
<td>410m</td>
<td>33m (8%)</td>
</tr>
</tbody>
</table>

*Source: IHME, 2024*

For the four major NCDs the distribution of DALYs across WHO regions is shown in Figure 2.2.

#### Figure 2.2: Proportion (%) of person-years lost to disease (DALYs) for leading NCDs attributable to high BMI: WHO regions

![Figure 2.2](image)

*Source: IHME, 2024*

### World Bank income groups

#### Overweight and obesity trends 2020 to 2035

This section considers the numbers of adults estimated to experience overweight (excluding obesity, i.e. BMI ≥25 to 30 kg/m²) and obesity (BMI ≥ 30 kg/m²) in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends.
### Table 2.4: Adult overweight and obesity 2020-2035, World Bank income groups*

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Adults with overweight (millions)</th>
<th>Adults with obesity (millions)</th>
<th>Prevalence of overweight and obesity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2025</td>
<td>2030</td>
</tr>
<tr>
<td>Low</td>
<td>45.33</td>
<td>57.76</td>
<td>72.56</td>
</tr>
<tr>
<td></td>
<td>27.56</td>
<td>41.23</td>
<td>60.33</td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>Lower-Middle</td>
<td>409.58</td>
<td>479.29</td>
<td>553.95</td>
</tr>
<tr>
<td></td>
<td>193.29</td>
<td>254.82</td>
<td>336.35</td>
</tr>
<tr>
<td></td>
<td>32%</td>
<td>36%</td>
<td>40%</td>
</tr>
<tr>
<td>Upper-Middle</td>
<td>617.28</td>
<td>669.30</td>
<td>713.32</td>
</tr>
<tr>
<td></td>
<td>315.01</td>
<td>392.20</td>
<td>485.15</td>
</tr>
<tr>
<td></td>
<td>46%</td>
<td>51%</td>
<td>56%</td>
</tr>
<tr>
<td>High</td>
<td>314.39</td>
<td>316.07</td>
<td>312.89</td>
</tr>
<tr>
<td></td>
<td>271.90</td>
<td>312.85</td>
<td>356.67</td>
</tr>
<tr>
<td></td>
<td>61%</td>
<td>64%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Source: World Obesity Federation, 2023b

*Further analysis comparing Low & Middle Income Countries (LMICs) combined with High income countries can be found in Annex 2

### Deaths attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of deaths in the World Bank income groups, and the proportion of these attributable to high BMI, shown in Table 2.5.

### Table 2.5: Deaths of adults attributable to high BMI, World Bank income groups*

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Total deaths 2019</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>50.3m</td>
<td>5.0m (10%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>41.0m</td>
<td>5.0m (12%)</td>
</tr>
<tr>
<td>Low Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>3.0m</td>
<td>0.2m (6%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>1.8m</td>
<td>0.2m (11%)</td>
</tr>
<tr>
<td>Lower-Middle Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>17.6m</td>
<td>1.7m (9%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>13.2m</td>
<td>1.7m (13%)</td>
</tr>
<tr>
<td>Upper-Middle Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>18.9m</td>
<td>2.0m (11%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>16.5m</td>
<td>2.0m (12%)</td>
</tr>
<tr>
<td>High Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>10.7m</td>
<td>1.1m (11%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>9.6m</td>
<td>1.1m (12%)</td>
</tr>
</tbody>
</table>

Source: IHME, 2024

*Further analysis comparing LMICs combined with High income countries can be found in Annex 2

For the four major NCDs the distribution across the income groups is shown in Figure 2.3.
Figure 2.3: Proportion (%) of adult deaths from leading NCDs attributable to high BMI: World Bank income groups

Source: IHME, 2024

Years of life lost to disease (DALYs) attributed to high body-mass index

For 2019, the IHME (2024) has provided estimates of the numbers of healthy life-years lost to disease (DALYs) in the World Bank income groups, and the proportion of these attributable to high BMI, shown in Table 2.6.

Table 2.6: Adult person-years lost to disease (DALYs) attributable to high BMI, World Bank income groups*

<table>
<thead>
<tr>
<th>Income Group</th>
<th>Total DALYs 2019</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>1,871m</td>
<td>160m (9%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>1,454m</td>
<td>160m (11%)</td>
</tr>
<tr>
<td><strong>Low Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>135m</td>
<td>6.5m (5%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>77m</td>
<td>6.5m (8%)</td>
</tr>
<tr>
<td><strong>Lower-Middle Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>727m</td>
<td>57.6m (8%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>527m</td>
<td>57.6m (11%)</td>
</tr>
<tr>
<td><strong>Upper-Middle Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>673m</td>
<td>63.2m (9%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>558m</td>
<td>63.2m (11%)</td>
</tr>
<tr>
<td><strong>High Income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>336m</td>
<td>32.4m (10%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>293m</td>
<td>32.4m (11%)</td>
</tr>
</tbody>
</table>

Source: IHME, 2024

*Further analysis comparing LMICs combined with High income countries can be found in Annex 2

For the four major NCDs the distribution of DALYs across income groups is shown in Figure 2.4
Figure 2.4: Proportion (%) of adult DALYs from leading NCDs attributable to high BMI: World Bank income groups

Source: IHME, 2024
Section 3: High BMI and the risk of non-communicable disease in childhood: Analyses of numbers and trends by WHO regions and World Bank income groups
Section 3. High BMI and the risk of non-communicable disease in childhood: Analyses of numbers and trends by WHO regions and World Bank income groups

This section considers the distribution of high BMI in childhood (age under 20 years) according to WHO region and according to World Bank income group, and the early signs of non-communicable disease they may experience attributable to high BMI.

WHO regional data

Overweight and obesity trends 2020-2035

This section considers the numbers of children estimated to experience high BMI in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends. Overweight is defined as a BMI >1sd to 2sd above the WHO median child reference values. Obesity is a BMI >2sd above the reference value.

Table 3.1: Child overweight and obesity 2020-2035, WHO regions

<table>
<thead>
<tr>
<th>Region</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>African region (AFRO)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with overweight</td>
<td>44.74</td>
<td>62.63</td>
<td>84.78</td>
<td>114.02</td>
</tr>
<tr>
<td>(millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with obesity</td>
<td>15.55</td>
<td>25.86</td>
<td>40.37</td>
<td>60.96</td>
</tr>
<tr>
<td>Prevalence of overweight and</td>
<td>15%</td>
<td>19%</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>obesity (high BMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Eastern Mediterranean region</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(EMRO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with overweight</td>
<td>28.44</td>
<td>34.56</td>
<td>40.05</td>
<td>45.20</td>
</tr>
<tr>
<td>(millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with obesity</td>
<td>26.33</td>
<td>36.82</td>
<td>49.17</td>
<td>64.33</td>
</tr>
<tr>
<td>Prevalence of overweight and</td>
<td>23%</td>
<td>28%</td>
<td>33%</td>
<td>39%</td>
</tr>
<tr>
<td>obesity (high BMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>European region (EURO)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with overweight</td>
<td>88.73</td>
<td>103.68</td>
<td>115.57</td>
<td>125.52</td>
</tr>
<tr>
<td>(millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with obesity</td>
<td>69.99</td>
<td>94.85</td>
<td>122.97</td>
<td>156.24</td>
</tr>
<tr>
<td>Prevalence of overweight and</td>
<td>25%</td>
<td>29%</td>
<td>34%</td>
<td>40%</td>
</tr>
<tr>
<td>obesity (high BMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Region of the Americas (PAHO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with overweight</td>
<td>45.98</td>
<td>47.24</td>
<td>47.42</td>
<td>47.41</td>
</tr>
<tr>
<td>(millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with obesity</td>
<td>42.25</td>
<td>48.85</td>
<td>55.15</td>
<td>62.32</td>
</tr>
<tr>
<td>Prevalence of overweight and</td>
<td>39%</td>
<td>43%</td>
<td>48%</td>
<td>53%</td>
</tr>
<tr>
<td>obesity (high BMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**South-East Asia region (SEARO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with overweight</td>
<td>41.22</td>
<td>53.07</td>
<td>66.23</td>
<td>81.08</td>
</tr>
<tr>
<td>(millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with obesity</td>
<td>22.02</td>
<td>33.21</td>
<td>48.10</td>
<td>67.71</td>
</tr>
<tr>
<td>Prevalence of overweight and</td>
<td>12%</td>
<td>17%</td>
<td>23%</td>
<td>31%</td>
</tr>
<tr>
<td>obesity (high BMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Western Pacific region (WPRO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with overweight</td>
<td>66.73</td>
<td>78.45</td>
<td>77.93</td>
<td>69.63</td>
</tr>
<tr>
<td>(millions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with obesity</td>
<td>51.24</td>
<td>74.69</td>
<td>91.14</td>
<td>98.74</td>
</tr>
<tr>
<td>Prevalence of overweight and</td>
<td>33%</td>
<td>42%</td>
<td>52%</td>
<td>60%</td>
</tr>
<tr>
<td>obesity (high BMI)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: World Obesity Federation, 2023b
On the basis of prevalence data for the three leading signs of risk for non-communicable disease in children of different weight status (see Annex 1) we can estimate the numbers of children with such signs attributable to their high BMI. The predicted numbers are shown in the following three figures.

**Figure 3.1: Numbers of children (millions) with low HDL cholesterol attributable to high BMI 2020-2035, WHO regions**

![Graph showing numbers of children with low HDL cholesterol](image)

Source: World Obesity Federation, 2023b

**Figure 3.2: Numbers of children (millions) with high blood pressure attributable to high BMI 2020-2035, WHO regions**

![Graph showing numbers of children with high blood pressure](image)

Source: World Obesity Federation, 2023b
**World Bank income group data**

Overweight and obesity trends 2020-2035

This section considers the numbers of children estimated to experience high BMI in 2020 and their rising numbers and prevalence levels through to 2035, assuming no significant interventions to alter current trends. Overweight is defined as a BMI >1sd to 2sd above the WHO median child reference values. Obesity is a BMI >2sd above the reference value.

**Table 3.2: Child overweight and obesity 2020-2035, World Bank income groups***

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Children with overweight (millions)</td>
<td>20.2</td>
<td>29.2</td>
<td>41.3</td>
</tr>
<tr>
<td></td>
<td>Children with obesity (millions)</td>
<td>8.2</td>
<td>13.2</td>
<td>20.9</td>
</tr>
<tr>
<td></td>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>12%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Lower-Middle</td>
<td>Children with overweight (millions)</td>
<td>87.2</td>
<td>113.1</td>
<td>142.0</td>
</tr>
<tr>
<td></td>
<td>Children with obesity (millions)</td>
<td>44.3</td>
<td>65.7</td>
<td>93.8</td>
</tr>
<tr>
<td></td>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>14%</td>
<td>19%</td>
<td>25%</td>
</tr>
<tr>
<td>Upper-Middle</td>
<td>Children with overweight (millions)</td>
<td>109.1</td>
<td>124.8</td>
<td>125.8</td>
</tr>
<tr>
<td></td>
<td>Children with obesity (millions)</td>
<td>86.3</td>
<td>120.9</td>
<td>149.0</td>
</tr>
<tr>
<td></td>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>34%</td>
<td>43%</td>
<td>51%</td>
</tr>
<tr>
<td>High</td>
<td>Children with overweight (millions)</td>
<td>42.4</td>
<td>43.3</td>
<td>42.8</td>
</tr>
<tr>
<td></td>
<td>Children with obesity (millions)</td>
<td>35.2</td>
<td>40.1</td>
<td>44.1</td>
</tr>
<tr>
<td></td>
<td>Prevalence of overweight and obesity (high BMI)</td>
<td>37%</td>
<td>41%</td>
<td>44%</td>
</tr>
</tbody>
</table>

*Source: World Obesity Federation, 2023b*
Further analysis comparing LMICs combined with High income countries can be found in Annex 2.

**Figure 3.4:** Numbers of children (millions) with low HDL cholesterol attributable to high BMI 2020-2035, World Bank income groups

Source: World Obesity Federation, 2023b

**Figure 3.5:** Numbers of children (millions) with high blood pressure attributable to high BMI 2020-2035, World Bank income groups

Source: World Obesity Federation, 2023b
Figure 3.6: Numbers of children (millions) with hyperglycaemia attributable to high BMI 2020-2035, World Bank income groups

Source: World Obesity Federation, 2023b
Section 4: Accelerating action on Obesity
Section 4. Accelerating action on Obesity: catalysing a multi-sectoral approach

Today, no country in the world is on track to reach the target to ‘halt the rise’ of obesity prevalence by 2030, as set in 2013 by the World Health Organization and approved by all governments. In reality, rather than a zero increase, the World Obesity Atlas 2022 (World Obesity Federation, 2022) estimated that global obesity is likely to have doubled over this time.

By 2035, over half the world’s population will be above a healthy weight. The majority of these people will be in middle-income countries, where obesity is often poorly understood and capacity is lacking to address it. Over 65% of adults who live with obesity globally were living in low- and middle-income countries in 2020, and this is expected to rise to 7 in 10 adults with obesity in 2030.

Obesity is both a disease in its own right and a risk factor for many other non-communicable diseases (NCDs), which are increasingly putting the health of children at risk. 80% of children living with obesity were living in low- and middle-income countries in 2020.

The number of people with obesity is increasing globally, and as highlighted in the World Obesity Atlas 2023 (World Obesity Federation, 2023a) - with significant economic impact.

There are marked differences between regions and levels of economic development that require urgent and tailored action to address obesity and reduce the prevalence.

Low-income and middle-income countries face a double burden of malnutrition, whereby overnutrition and undernutrition coexist within the same individual, household, or population. The double burden of malnutrition has increased in the poorest low- and middle-income countries, particularly in south and east Asia and sub-Saharan Africa, mainly due to overweight and obesity increases (Popkin et al, 2019). Many countries, including Small Island Developing States (SIDS), are experiencing a triple burden with the direct and indirect impacts of climate change exacerbating the burden. The impact of overweight and obesity in poorer communities not only increases their vulnerability health-wise, but their resilience to economic, social and climate crises. It is often the people least able to afford the consequences who will face the heaviest financial burden of the rise of obesity prevalence: paying out-of-pocket for treatment for obesity-related diseases, losing out on work income, and having to take time off work and school to care for family members. The global economic impact of overweight and obesity was estimated to be 2.4% of GDP in 2020, and is estimated to increase to $4.32 trillion by 2035.

“The multiple overlapping crises. The climate crisis and the COVID-19 pandemic, combined with poverty, unemployment, inequality and the marginalization of minority communities are fuelling an increase in obesity, noncommunicable diseases and mental health conditions.”

Dr Tedros, Director-General WHO
The belief that obesity can be addressed through single silo solutions was put to rest during COVID-19, when underlying overweight and obesity combined with increased exposure to unhealthy diet and physical inactivity led to more people becoming ill and dying of COVID-19. The High-Level Meeting on Universal Health Coverage at the United Nations General Assembly in 2023 was a moment for recognising that inclusion of and financing for both prevention and treatment of obesity as part of Universal Health Coverage (UHC) would be essential. Obesity is not only a part of worldwide health, its far-reaching nature means it is at the heart of global health.

However, financing for obesity is nowhere near reflective of the level of impact of obesity on health and economies worldwide. Sustainable, effective funding is urgently needed, alongside effective public health policies and professionals trained to understand and manage obesity. Such financing must be accompanied by coordinated and robust efforts across sectors – public and private, food and health, high-, middle- and low-income countries and all populations. To date, policies to address obesity across the globe have been impeded by lack of political funding, financial support, and coordinated efforts. Fragmentation is best addressed by multisectoral approaches that incorporate immediate action into long-term plans, and that recognise, align and resource the wide range of stakeholders around common objectives and shared accountability.

Fortunately, the approval in 2022 of the obesity recommendations and WHO Acceleration Plan (Branca et al, 2023) offer frameworks and a roadmap for action on obesity, with national plans, evidence-based policies, effective treatment options, training and global coordination. Now, commitments and financing are needed to move from plans to action, and the remaining challenge is to break down the silos, looking for solutions and catalytic funding across sectors. World Obesity’s 2023 Global Obesity Forum in New York during the UN General Assembly touched upon many of these challenges, and the discussion paper ‘An economic Imperative: Catalysing funding to address obesity’ highlights some possible courses of action:

• Making the case for the prevention and treatment of obesity as a public health emergency should appeal to the heads, hearts and pockets of those who hold the purse strings, both within and outside government.

• Mainstreaming obesity, both as part of NCDs but also of other agendas, by fostering collaboration and partnerships that take a holistic, people-centred approach.

• Building the evidence case on the economic impact and the benefits of action on obesity.

• Supporting rapid, sustainable and permanent action to ensure that the environments where we live, learn, work and play are actively supportive of health and of weight maintenance.

Obesity is at the heart of many other agendas but is often not framed as such: building a case for proactively addressing obesity from new areas will have benefits far beyond obesity. As the obesity community advances as part of a wider, positive change in global health, breaking out of disease silos, it positions itself at the heart of this change, and is impossible to ignore.
Section 5: Country scorecards
## Country Index

<table>
<thead>
<tr>
<th>Country</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>43</td>
</tr>
<tr>
<td>Albania</td>
<td>44</td>
</tr>
<tr>
<td>Algeria</td>
<td>45</td>
</tr>
<tr>
<td>Angola</td>
<td>46</td>
</tr>
<tr>
<td>Antigua and Barbuda</td>
<td>47</td>
</tr>
<tr>
<td>Argentina</td>
<td>48</td>
</tr>
<tr>
<td>Armenia</td>
<td>49</td>
</tr>
<tr>
<td>Australia</td>
<td>50</td>
</tr>
<tr>
<td>Austria</td>
<td>51</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>52</td>
</tr>
<tr>
<td>Bahamas</td>
<td>53</td>
</tr>
<tr>
<td>Bahrain</td>
<td>54</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>55</td>
</tr>
<tr>
<td>Barbados</td>
<td>56</td>
</tr>
<tr>
<td>Belarus</td>
<td>57</td>
</tr>
<tr>
<td>Belgium</td>
<td>58</td>
</tr>
<tr>
<td>Belize</td>
<td>59</td>
</tr>
<tr>
<td>Benin</td>
<td>60</td>
</tr>
<tr>
<td>Bhutan</td>
<td>61</td>
</tr>
<tr>
<td>Bolivia</td>
<td>62</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>63</td>
</tr>
<tr>
<td>Botswana</td>
<td>64</td>
</tr>
<tr>
<td>Brazil</td>
<td>65</td>
</tr>
<tr>
<td>Brunei Darussalam</td>
<td>66</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>67</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>68</td>
</tr>
<tr>
<td>Burundi</td>
<td>69</td>
</tr>
<tr>
<td>Cabo Verde</td>
<td>70</td>
</tr>
<tr>
<td>Cambodia</td>
<td>71</td>
</tr>
<tr>
<td>Cameroon</td>
<td>72</td>
</tr>
<tr>
<td>Canada</td>
<td>73</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>74</td>
</tr>
<tr>
<td>Chad</td>
<td>75</td>
</tr>
<tr>
<td>Chile</td>
<td>76</td>
</tr>
<tr>
<td>China</td>
<td>77</td>
</tr>
<tr>
<td>China (Hong Kong SAR)</td>
<td>78</td>
</tr>
<tr>
<td>Colombia</td>
<td>79</td>
</tr>
<tr>
<td>Comoros</td>
<td>80</td>
</tr>
<tr>
<td>Congo</td>
<td>81</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>82</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>83</td>
</tr>
<tr>
<td>Croatia</td>
<td>84</td>
</tr>
<tr>
<td>Cuba</td>
<td>85</td>
</tr>
<tr>
<td>Cyprus</td>
<td>86</td>
</tr>
<tr>
<td>Czechia</td>
<td>87</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>88</td>
</tr>
<tr>
<td>Denmark</td>
<td>89</td>
</tr>
<tr>
<td>Djibouti</td>
<td>90</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>91</td>
</tr>
<tr>
<td>Ecuador</td>
<td>92</td>
</tr>
<tr>
<td>Egypt</td>
<td>93</td>
</tr>
<tr>
<td>El Salvador</td>
<td>94</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>95</td>
</tr>
<tr>
<td>Eritrea</td>
<td>96</td>
</tr>
<tr>
<td>Estonia</td>
<td>97</td>
</tr>
<tr>
<td>Eswatini</td>
<td>98</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>99</td>
</tr>
<tr>
<td>Fiji</td>
<td>100</td>
</tr>
<tr>
<td>Finland</td>
<td>101</td>
</tr>
<tr>
<td>France</td>
<td>102</td>
</tr>
<tr>
<td>French Polynesia</td>
<td>103</td>
</tr>
<tr>
<td>Gabon</td>
<td>104</td>
</tr>
<tr>
<td>Gambia</td>
<td>105</td>
</tr>
<tr>
<td>Georgia</td>
<td>106</td>
</tr>
<tr>
<td>Germany</td>
<td>107</td>
</tr>
<tr>
<td>Ghana</td>
<td>108</td>
</tr>
<tr>
<td>Greece</td>
<td>109</td>
</tr>
<tr>
<td>Grenada</td>
<td>110</td>
</tr>
<tr>
<td>Guatemala</td>
<td>111</td>
</tr>
<tr>
<td>Guinea</td>
<td>112</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>113</td>
</tr>
<tr>
<td>Guyana</td>
<td>114</td>
</tr>
<tr>
<td>Haiti</td>
<td>115</td>
</tr>
<tr>
<td>Honduras</td>
<td>116</td>
</tr>
<tr>
<td>Hungary</td>
<td>117</td>
</tr>
<tr>
<td>Iceland</td>
<td>118</td>
</tr>
<tr>
<td>India</td>
<td>119</td>
</tr>
<tr>
<td>Indonesia</td>
<td>120</td>
</tr>
<tr>
<td>Iran</td>
<td>121</td>
</tr>
<tr>
<td>Iraq</td>
<td>122</td>
</tr>
<tr>
<td>Ireland</td>
<td>123</td>
</tr>
<tr>
<td>Israel</td>
<td>124</td>
</tr>
<tr>
<td>Italy</td>
<td>125</td>
</tr>
<tr>
<td>Jamaica</td>
<td>126</td>
</tr>
<tr>
<td>Japan</td>
<td>127</td>
</tr>
<tr>
<td>Jordan</td>
<td>128</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>129</td>
</tr>
<tr>
<td>Kenya</td>
<td>130</td>
</tr>
<tr>
<td>Kiribati</td>
<td>131</td>
</tr>
<tr>
<td>Kuwait</td>
<td>132</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>133</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>134</td>
</tr>
<tr>
<td>Latvia</td>
<td>135</td>
</tr>
<tr>
<td>Lebanon</td>
<td>136</td>
</tr>
<tr>
<td>Lesotho</td>
<td>137</td>
</tr>
<tr>
<td>Liberia</td>
<td>138</td>
</tr>
<tr>
<td>Country</td>
<td>Page</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Libya</td>
<td>139</td>
</tr>
<tr>
<td>Lithuania</td>
<td>140</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>141</td>
</tr>
<tr>
<td>Madagascar</td>
<td>142</td>
</tr>
<tr>
<td>Malawi</td>
<td>143</td>
</tr>
<tr>
<td>Malaysia</td>
<td>144</td>
</tr>
<tr>
<td>Maldives</td>
<td>145</td>
</tr>
<tr>
<td>Mali</td>
<td>146</td>
</tr>
<tr>
<td>Malta</td>
<td>147</td>
</tr>
<tr>
<td>Mauritania</td>
<td>148</td>
</tr>
<tr>
<td>Mauritius</td>
<td>149</td>
</tr>
<tr>
<td>Mexico</td>
<td>150</td>
</tr>
<tr>
<td>Micronesia (Federated States of)</td>
<td>151</td>
</tr>
<tr>
<td>Moldova</td>
<td>152</td>
</tr>
<tr>
<td>Mongolia</td>
<td>153</td>
</tr>
<tr>
<td>Montenegro</td>
<td>154</td>
</tr>
<tr>
<td>Morocco</td>
<td>155</td>
</tr>
<tr>
<td>Mozambique</td>
<td>156</td>
</tr>
<tr>
<td>Myanmar</td>
<td>157</td>
</tr>
<tr>
<td>Namibia</td>
<td>158</td>
</tr>
<tr>
<td>Nepal</td>
<td>159</td>
</tr>
<tr>
<td>Netherlands</td>
<td>160</td>
</tr>
<tr>
<td>New Zealand</td>
<td>161</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>162</td>
</tr>
<tr>
<td>Niger</td>
<td>163</td>
</tr>
<tr>
<td>Nigeria</td>
<td>164</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>165</td>
</tr>
<tr>
<td>Norway</td>
<td>166</td>
</tr>
<tr>
<td>Oman</td>
<td>167</td>
</tr>
<tr>
<td>Pakistan</td>
<td>168</td>
</tr>
<tr>
<td>Palestine</td>
<td>169</td>
</tr>
<tr>
<td>Panama</td>
<td>170</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>171</td>
</tr>
<tr>
<td>Paraguay</td>
<td>172</td>
</tr>
<tr>
<td>Peru</td>
<td>173</td>
</tr>
<tr>
<td>Philippines</td>
<td>174</td>
</tr>
<tr>
<td>Poland</td>
<td>175</td>
</tr>
<tr>
<td>Portugal</td>
<td>176</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>177</td>
</tr>
<tr>
<td>Qatar</td>
<td>178</td>
</tr>
<tr>
<td>Romania</td>
<td>179</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>180</td>
</tr>
<tr>
<td>Rwanda</td>
<td>181</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>182</td>
</tr>
<tr>
<td>Saint Vincent and the Grenadines</td>
<td>183</td>
</tr>
<tr>
<td>Samoa</td>
<td>184</td>
</tr>
<tr>
<td>Sao Tome and Principe</td>
<td>185</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>186</td>
</tr>
<tr>
<td>Senegal</td>
<td>187</td>
</tr>
<tr>
<td>Serbia</td>
<td>188</td>
</tr>
<tr>
<td>Seychelles</td>
<td>189</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>190</td>
</tr>
<tr>
<td>Singapore</td>
<td>191</td>
</tr>
<tr>
<td>Slovakia</td>
<td>192</td>
</tr>
<tr>
<td>Slovenia</td>
<td>193</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>194</td>
</tr>
<tr>
<td>Somalia</td>
<td>195</td>
</tr>
<tr>
<td>South Africa</td>
<td>196</td>
</tr>
<tr>
<td>South Korea</td>
<td>197</td>
</tr>
<tr>
<td>Spain</td>
<td>198</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>199</td>
</tr>
<tr>
<td>Sudan</td>
<td>200</td>
</tr>
<tr>
<td>Suriname</td>
<td>201</td>
</tr>
<tr>
<td>Sweden</td>
<td>202</td>
</tr>
<tr>
<td>Switzerland</td>
<td>203</td>
</tr>
<tr>
<td>Syrian Arab Republic</td>
<td>204</td>
</tr>
<tr>
<td>Taiwan</td>
<td>205</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>206</td>
</tr>
<tr>
<td>Tanzania</td>
<td>207</td>
</tr>
<tr>
<td>Thailand</td>
<td>208</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>209</td>
</tr>
<tr>
<td>Togo</td>
<td>210</td>
</tr>
<tr>
<td>Tonga</td>
<td>211</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>212</td>
</tr>
<tr>
<td>Tunisia</td>
<td>213</td>
</tr>
<tr>
<td>Turkey</td>
<td>214</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>215</td>
</tr>
<tr>
<td>Uganda</td>
<td>216</td>
</tr>
<tr>
<td>Ukraine</td>
<td>217</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>218</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>219</td>
</tr>
<tr>
<td>United States of America</td>
<td>220</td>
</tr>
<tr>
<td>Uruguay</td>
<td>221</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>222</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>223</td>
</tr>
<tr>
<td>Venezuela</td>
<td>224</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>225</td>
</tr>
<tr>
<td>Yemen</td>
<td>226</td>
</tr>
<tr>
<td>Zambia</td>
<td>227</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>228</td>
</tr>
</tbody>
</table>
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>790,510</td>
<td>22,044</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>137,641</td>
<td>2,475</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>263,091</td>
<td>8,121</td>
</tr>
<tr>
<td>of which stroke</td>
<td>181,883</td>
<td>4,870</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>23,546</td>
<td>769</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>13%</td>
<td>34%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,957,201</td>
<td>7,166,800</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>139,918</td>
<td>605,324</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>66,009</td>
<td>248,473</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>179,431</td>
<td>695,913</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020-2021</th>
<th>2025-2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>26.0</td>
<td>26.0</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.74</td>
<td>0.74</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>88.1</td>
<td>88.1</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>10.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>13.4</td>
<td>13.4</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>81,871</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,120</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>8,929</td>
</tr>
<tr>
<td>of which stroke</td>
<td>26,643</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>23,622</td>
</tr>
<tr>
<td>of which high blood pressure attributable to high BMI</td>
<td>5,521</td>
</tr>
<tr>
<td>of which hyperglycaemia attributable to high BMI</td>
<td>8,039</td>
</tr>
<tr>
<td>of which low HDL cholesterol attributable to high BMI</td>
<td>22,904</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>163,068</td>
<td>228,071</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>11,956</td>
<td>21,075</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>5,521</td>
<td>8,039</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>15,074</td>
<td>22,904</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 1.3 |
| Proportion of the population living in urban areas 2020 (%) | 62.1 |
| Annual increase in urbanisation 1995–2020 (%) | 1.89 |
| Plastic waste (latest year) (kg per capita) | 36.6 |
| Proportion of adults taking insufficient physical activity 2016 (%) | n/a |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 73.9 |
| Consumption of animal proteins 2021 (grams per capita per day) | 66.7 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 48.5 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Condition</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,175,127</td>
<td>36,085</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>234,202</td>
<td>2,890</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>397,896</td>
<td>15,642</td>
</tr>
<tr>
<td>of which stroke</td>
<td>202,711</td>
<td>6,022</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>34,889</td>
<td>1,427</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>39%</td>
<td>62%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,480,040</td>
<td>8,572,081</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>385,402</td>
<td>858,534</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>155,833</td>
<td>306,977</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>437,953</td>
<td>888,622</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>73.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>51.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>33.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>83.8</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>26.2</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>32.1</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. (2) See methodology sections of the World Obesity Federation Atlas 2024
4. (3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
7. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Angola

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>259,775</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>71,468</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>40,972</td>
</tr>
<tr>
<td>of which stroke</td>
<td>71,961</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>9,374</td>
</tr>
<tr>
<td></td>
<td>6,972</td>
</tr>
<tr>
<td></td>
<td>1,375</td>
</tr>
<tr>
<td></td>
<td>1,342</td>
</tr>
<tr>
<td></td>
<td>1,990</td>
</tr>
<tr>
<td></td>
<td>323</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>34%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,849,560</td>
<td>6,696,391</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>108,711</td>
<td>467,529</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>60,669</td>
<td>225,032</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>159,730</td>
<td>609,228</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>66.8</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.67</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>22.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>13.9</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>20.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

**REFERENCES:**

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

**Projected numbers of adults and children with high Body Mass Index (BMI)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>3,051</td>
<td>91</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,185</td>
<td>26</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>374</td>
<td>15</td>
</tr>
<tr>
<td>of which stroke</td>
<td>452</td>
<td>15</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>160</td>
<td>6</td>
</tr>
</tbody>
</table>

**Deaths from NCDs due to high BMI in adults 2019**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Early signs of NCDs in children aged 5–19 years, 2020 and 2035**

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>29%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,777</td>
<td>4,650</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>400</td>
<td>670</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>108</td>
<td>181</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>339</td>
<td>567</td>
</tr>
</tbody>
</table>

**Environmental correlates of obesity**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>24.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-1.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>41.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>79.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>62.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>50.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REFERENCES:**

(1) See methodology sections of the World Obesity Federation Atlas 2024
(2) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(3) DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,020,392</td>
<td>36,675</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>228,385</td>
<td>4,878</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>195,691</td>
<td>9,116</td>
</tr>
<tr>
<td>of which stroke</td>
<td>174,825</td>
<td>5,741</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>108,382</td>
<td>4,963</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Non-communicable diseases of which:
- Diabetes mellitus
- Coronary (ischaemic) heart disease
- Stroke
- Cancers (neoplasms)

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>39%</td>
<td>49%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,234,788</td>
<td>4,796,994</td>
</tr>
<tr>
<td>of which, children with high blood pressure</td>
<td>370,405</td>
<td>455,689</td>
</tr>
<tr>
<td>attributable to high BMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which, children with hyperglycaemia</td>
<td>147,745</td>
<td>169,986</td>
</tr>
<tr>
<td>attributable to high BMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol</td>
<td>416,529</td>
<td>486,928</td>
</tr>
<tr>
<td>attributable to high BMI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 4.2
- Annual increase in GHG emissions 2000–2015 (%): 1.3
- Proportion of the population living in urban areas 2020 (%): 92.1
- Annual increase in urbanisation 1995–2020 (%): 0.17
- Plastic waste (latest year) (kg per capita): 60.9
- Proportion of adults taking insufficient physical activity 2016 (%): 41.6
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): 84.8
- Consumption of animal proteins 2021 (grams per capita per day): 75.9
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 38.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

Argentina

Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>7,500,000</td>
<td>15,000,000</td>
</tr>
<tr>
<td>2025</td>
<td>22,500,000</td>
<td>45,000,000</td>
</tr>
<tr>
<td>2030</td>
<td>30,000,000</td>
<td>60,000,000</td>
</tr>
<tr>
<td>2035</td>
<td>37,500,000</td>
<td>75,000,000</td>
</tr>
</tbody>
</table>

World Obesity Atlas 2024

1.7% Annual growth rate in the projected numbers of adults with high BMI 2020–2035

0.8% Annual growth rate in the projected numbers of children with high BMI 2020–2035

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>123,057</td>
<td>4,463</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>30,167</td>
<td>703</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>46,429</td>
<td>2,117</td>
</tr>
<tr>
<td>of which stroke</td>
<td>17,301</td>
<td>586</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>7,990</td>
<td>335</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>3750</td>
<td>5000</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>1230</td>
<td>1750</td>
</tr>
<tr>
<td>Stroke</td>
<td>900</td>
<td>1200</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>500</td>
<td>650</td>
</tr>
<tr>
<td>Diabetes</td>
<td>700</td>
<td>750</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>1120</td>
<td>1450</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>21%</td>
<td>28%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>113,835</td>
<td>131,468</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>6,971</td>
<td>8,856</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,754</td>
<td>4,395</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>9,948</td>
<td>11,826</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>63.3</td>
<td>63.3</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.17</td>
<td>-0.17</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>19.3</td>
<td>19.3</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>22.6</td>
<td>22.6</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>77.7</td>
<td>77.7</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>56.4</td>
<td>56.4</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>50.5</td>
<td>50.5</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>523,193</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>105,848</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>101,852</td>
</tr>
<tr>
<td>of which stroke</td>
<td>50,459</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>74,685</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>38%</td>
<td>46%</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>139,703</td>
<td>192,078</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>61,149</td>
<td>76,816</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>168,849</td>
<td>216,432</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</th>
<th>15.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.7</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>86.2</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.06</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>42.7</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>30.4</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>89.0</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>77.7</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>104.2</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>203,239</td>
<td>8,982</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>42,631</td>
<td>875</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>47,412</td>
<td>2,930</td>
</tr>
<tr>
<td>of which stroke</td>
<td>17,975</td>
<td>651</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>23,894</td>
<td>1,214</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>30%</td>
<td>39%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>389,847</td>
<td>496,197</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>27,781</td>
<td>38,566</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>13,142</td>
<td>16,960</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>35,703</td>
<td>46,784</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental Factor</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>7.1</td>
<td>7.1</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>58.7</td>
<td>58.7</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.19</td>
<td>-0.19</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>65.3</td>
<td>65.3</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>30.1</td>
<td>30.1</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>77.8</td>
<td>77.8</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>67.2</td>
<td>67.2</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>40.9</td>
<td>40.9</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Azerbaijan

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>438,650</td>
<td>14,333</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>70,938</td>
<td>1,268</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>179,773</td>
<td>7,132</td>
</tr>
<tr>
<td>of which stroke</td>
<td>96,976</td>
<td>3,187</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>22,393</td>
<td>797</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>21%</td>
<td>31%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>502,524</td>
<td>590,775</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>31,427</td>
<td>42,021</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>16,621</td>
<td>19,909</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>44,189</td>
<td>54,071</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 3.2
- Annual increase in GHG emissions 2000–2015 (%): -0.5
- Proportion of the population living in urban areas 2020 (%): 56.4
- Annual increase in urbanisation 1995–2020 (%): 0.31
- Plastic waste (latest year) (kg per capita): 23.9
- Proportion of adults taking insufficient physical activity 2016 (%): n/a
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): n/a
- Consumption of animal proteins 2021 (grams per capita per day): 37.0
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 51.3

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
 Bahamas

Projected numbers of adults and children with high Body Mass Index (BMI)  

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>300,000</td>
<td>225,000</td>
<td>150,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Children</td>
<td>75,000</td>
<td>150,000</td>
<td>225,000</td>
<td>300,000</td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>15,392</td>
<td>441</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>4,364</td>
<td>79</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,541</td>
<td>89</td>
</tr>
<tr>
<td>of which stroke</td>
<td>2,331</td>
<td>70</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>933</td>
<td>35</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>41%</td>
<td>54%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>37,786</td>
<td>38,908</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>3,414</td>
<td>3,859</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,326</td>
<td>1,391</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,762</td>
<td>4,018</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): n/a
- Annual increase in GHG emissions 2000–2015 (%): n/a
- Proportion of the population living in urban areas 2020 (%): 83.2
- Annual increase in urbanisation 1995–2020 (%): 0.11
- Plastic waste (latest year) (kg per capita): 88.7
- Proportion of adults taking insufficient physical activity 2016 (%): 43.3
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): 84.4
- Consumption of animal proteins 2021 (grams per capita per day): 67.6
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 46.1

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
World Obesity Atlas 2024

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>48,919</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>24,241</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>10,291</td>
</tr>
<tr>
<td>Stroke</td>
<td>4,276</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,769</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,127</td>
<td>600</td>
<td>900</td>
<td>1200</td>
<td>1,000</td>
<td>1,127</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>105,241</td>
<td>130,298</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>9,487</td>
<td>12,863</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,692</td>
<td>4,653</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>10,469</td>
<td>13,429</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 22.1 |
| Annual increase in GHG emissions 2000–2015 (%) | -0.1 |
| Proportion of the population living in urban areas 2020 (%) | 89.5 |
| Annual increase in urbanisation 1995–2020 (%) | 0.05 |
| Plastic waste (latest year) (kg per capita) | 49.4 |
| Proportion of adults taking insufficient physical activity 2016 (%) | n/a |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 81.0 |
| Consumption of animal proteins 2021 (grams per capita per day) | 59.2 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 52.1 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

NCD data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Bangladesh

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,641,679</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>347,702</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>387,917</td>
</tr>
<tr>
<td>of which stroke</td>
<td>602,006</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>41,539</td>
</tr>
<tr>
<td></td>
<td>43,801</td>
</tr>
<tr>
<td></td>
<td>5,797</td>
</tr>
<tr>
<td></td>
<td>12,401</td>
</tr>
<tr>
<td></td>
<td>17,271</td>
</tr>
<tr>
<td></td>
<td>1,519</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>5,946,677</td>
<td>14,280,437</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>399,037</td>
<td>1,110,340</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>198,663</td>
<td>488,134</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>534,266</td>
<td>1,346,595</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>38.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.29</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>27.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>66.1</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>13.2</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>10.4</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>13,475</td>
<td>451</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>5,395</td>
<td>145</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,688</td>
<td>75</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,888</td>
<td>69</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,241</td>
<td>54</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>32%</td>
<td>51%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>16,679</td>
<td>22,876</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,444</td>
<td>2,262</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>581</td>
<td>817</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,634</td>
<td>2,359</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>31.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.53</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>106.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>42.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>81.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>62.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>82.9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(3) See methodology sections of the World Obesity Federation Atlas 2024.

(1) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Belarus

Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>1,500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>2025</td>
<td>4,500,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>2030</td>
<td>6,000,000</td>
<td>2,000,000</td>
</tr>
<tr>
<td>2035</td>
<td>6,000,000</td>
<td>3,000,000</td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Cause</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>481,844</td>
<td>19,272</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>28,571</td>
<td>201</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>256,969</td>
<td>12,645</td>
</tr>
<tr>
<td>of which stroke</td>
<td>108,050</td>
<td>3,804</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>29,364</td>
<td>1,200</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>27%</td>
<td>42%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>434,547</td>
<td>547,091</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>31,910</td>
<td>45,897</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>14,717</td>
<td>18,945</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>40,191</td>
<td>52,994</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>5.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>79.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>54.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>14.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>69.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>55.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

ANNEX:

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

![Graph showing projected numbers of adults and children with high BMI from 2020 to 2035.](image)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>220,261</td>
<td>8,573</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>48,797</td>
<td>617</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>43,495</td>
<td>2,429</td>
</tr>
<tr>
<td>of which stroke</td>
<td>26,745</td>
<td>1,075</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>32,467</td>
<td>1,689</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

![Bar chart showing deaths from NCDs due to high BMI in adults in 2019.](image)

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>529,529</td>
<td>516,175</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>35,136</td>
<td>36,073</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>17,661</td>
<td>17,349</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>47,408</td>
<td>46,975</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-2.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>98.1</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>57.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>35.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>83.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>71.0</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>50.3</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>10,670</td>
<td>298</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,944</td>
<td>91</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,618</td>
<td>58</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,521</td>
<td>45</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>480</td>
<td>17</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>32%</td>
<td>48%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>36,982</td>
<td>53,368</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>3,113</td>
<td>5,068</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,281</td>
<td>1,891</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,587</td>
<td>5,417</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>46.0</td>
<td>-0.03</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>80.3</td>
<td>41.3</td>
<td>45.5</td>
<td>45.5</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaborations projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

Environmental correlates of obesity

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024.
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>10,626</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,575</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>3,003</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,938</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>428</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
</tr>
<tr>
<td>Stroke</td>
</tr>
<tr>
<td>Coronary HD</td>
</tr>
<tr>
<td>Diabetes</td>
</tr>
<tr>
<td>All other NCDs</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>29,981</td>
<td>58,886</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,147</td>
<td>4,931</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,011</td>
<td>2,039</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,750</td>
<td>5,700</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlates of obesity</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>42.3</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.94</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>21.1</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>23.0</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.1</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>33.3</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>14.2</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaborations projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>274,472</td>
<td>8,981</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>78,240</td>
<td>2,065</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>45,133</td>
<td>1,795</td>
</tr>
<tr>
<td>of which stroke</td>
<td>51,737</td>
<td>1,596</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>18,537</td>
<td>739</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>2020</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>274,472</td>
<td>457,453</td>
<td>640,432</td>
</tr>
<tr>
<td>Coronary (ischaemic) heart disease</td>
<td>78,240</td>
<td>130,402</td>
<td>180,402</td>
</tr>
<tr>
<td>Stroke</td>
<td>45,133</td>
<td>75,208</td>
<td>105,208</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>51,737</td>
<td>83,147</td>
<td>113,147</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>18,537</td>
<td>29,298</td>
<td>40,298</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,260,038</td>
<td>2,045,167</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>91,528</td>
<td>172,360</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>42,602</td>
<td>70,878</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>116,123</td>
<td>198,432</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>70.1</td>
<td>70.1</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.68</td>
<td>0.68</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>21.1</td>
<td>21.1</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>85.5</td>
<td>85.5</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>42.0</td>
<td>42.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>85.2</td>
<td>85.2</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
**Bosnia and Herzegovina**

Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>1,600,000</td>
<td>1,200,000</td>
</tr>
<tr>
<td>2025</td>
<td>1,200,000</td>
<td>800,000</td>
</tr>
<tr>
<td>2030</td>
<td>800,000</td>
<td>400,000</td>
</tr>
<tr>
<td>2035</td>
<td>400,000</td>
<td>200,000</td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>161,923</td>
<td>5,845</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>46,645</td>
<td>1,129</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>39,899</td>
<td>1,948</td>
</tr>
<tr>
<td>of which stroke</td>
<td>34,400</td>
<td>1,358</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>13,039</td>
<td>572</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms: 4500
- Stroke: 3000
- Coronary HD: 1500
- Diabetes: 2000
- All other NCDs: 1500

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>27%</td>
<td>136,639</td>
</tr>
<tr>
<td>2035</td>
<td>47%</td>
<td>195,425</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015: 5.5
- Annual increase in GHG emissions 2000–2015 (%): 3.5
- Proportion of the population living in urban areas 2020 (%): 49.0
- Annual increase in urbanisation 1995–2020 (%): 0.74
- Plastic waste (latest year) (kg per capita): n/a
- Proportion of adults taking insufficient physical activity 2016 (%): 25.5
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): n/a
- Consumption of animal proteins 2021 (grams per capita per day): 39.6
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 45.7

**REFERENCES:**

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>68,912</td>
<td>2,137</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>22,832</td>
<td>647</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>11,500</td>
<td>398</td>
</tr>
<tr>
<td>of which stroke</td>
<td>14,559</td>
<td>447</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>3,250</td>
<td>120</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,250</td>
<td>1,500</td>
<td>225</td>
<td>300</td>
<td>447</td>
<td>750</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>201,807</td>
<td>496,152</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>15,636</td>
<td>46,993</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>6,894</td>
<td>17,572</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>19,007</td>
<td>50,305</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 3.0 |
| Proportion of the population living in urban areas 2020 (%) | 70.9 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 21.7 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 87.5 |
| Consumption of animal proteins 2021 (grams per capita per day) | 31.2 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 54.1 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>5,799,277</td>
<td>177,929</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,565,659</td>
<td>33,811</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,202,620</td>
<td>45,210</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,111,290</td>
<td>35,125</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>380,859</td>
<td>15,565</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>34%</td>
<td>50%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>15,583,308</td>
<td>20,390,263</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,255,580</td>
<td>1,913,882</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>535,864</td>
<td>720,870</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,487,826</td>
<td>2,060,098</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.2</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td></td>
<td></td>
<td></td>
<td>87.1</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
<td></td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>51.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
<td></td>
<td></td>
<td>47.0</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
<td></td>
<td></td>
<td>83.6</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
<td></td>
<td></td>
<td>64.3</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td></td>
<td></td>
<td>36.9</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Brunei Darussalam

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>7,822</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,481</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,344</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,076</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>502</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,076</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
<td>40</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>25</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>20</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>30</td>
<td>0</td>
<td>15</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>40</td>
<td>0</td>
<td>10</td>
<td>50</td>
<td>0</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which children with high blood pressure attributable to high BMI</td>
<td>32%</td>
<td>52%</td>
</tr>
<tr>
<td>of which children with hyperglycaemia attributable to high BMI</td>
<td>3,144</td>
<td>5,116</td>
</tr>
<tr>
<td>of which children with low HDL cholesterol attributable to high BMI</td>
<td>1,160</td>
<td>1,740</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>14.2</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.5</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>78.3</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.53</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>81.8</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>27.3</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>87.1</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>552,903</td>
<td>22,742</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>63,313</td>
<td>1,138</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>157,371</td>
<td>7,580</td>
</tr>
<tr>
<td>of which stroke</td>
<td>140,756</td>
<td>5,668</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>32,932</td>
<td>1,387</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>324,062</td>
<td>393,266</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>25,786</td>
<td>36,372</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>11,120</td>
<td>13,864</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>30,805</td>
<td>39,507</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m^2).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m^2).
(3) See methodology sections of the World Obesity Federation Atlas 2024.
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs in Adults</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>199,725</td>
<td>5,789</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>44,806</td>
<td>957</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>37,343</td>
<td>1,341</td>
</tr>
<tr>
<td>of which stroke</td>
<td>54,254</td>
<td>1,522</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>6,145</td>
<td>235</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>NCDs in Children</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>10%</td>
<td>24%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>812,771</td>
<td>2,702,985</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>36,578</td>
<td>124,277</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>25,846</td>
<td>86,147</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>65,511</td>
<td>218,966</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental Correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>30.6</td>
<td>30.6</td>
<td>30.6</td>
<td>30.6</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>2.87</td>
<td>2.87</td>
<td>2.87</td>
<td>2.87</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>12.8</td>
<td>12.8</td>
<td>12.8</td>
<td>12.8</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>20.3</td>
<td>20.3</td>
<td>20.3</td>
<td>20.3</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>7.5</td>
<td>7.5</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>20.3</td>
<td>20.3</td>
<td>20.3</td>
<td>20.3</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>7.5</td>
<td>7.5</td>
<td>7.5</td>
<td>7.5</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Burundi

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>65,068</td>
<td>1,809</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>14,180</td>
<td>308</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>10,780</td>
<td>346</td>
</tr>
<tr>
<td>of which stroke</td>
<td>21,157</td>
<td>587</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,697</td>
<td>93</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>14%</td>
<td>31%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>664,192</td>
<td>2,041,646</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>34,928</td>
<td>124,508</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>21,488</td>
<td>67,298</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>55,641</td>
<td>178,204</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>13.7</td>
<td>2.61</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>9.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>3.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024.
World Bank, FAO, and other sources (see methodology in 2024 Atlas).
**Cabo Verde**

Projected numbers of adults and children with high Body Mass Index (BMI)

![Graph showing projected numbers of adults and children with high BMI from 2020 to 2035.](image)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category of NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>10,679</td>
<td>342</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,570</td>
<td>54</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,322</td>
<td>99</td>
</tr>
<tr>
<td>of which stroke</td>
<td>2,384</td>
<td>70</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,028</td>
<td>40</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category of NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Stroke</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>66.7</td>
<td>1.26</td>
</tr>
<tr>
<td>Diabetes</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>18%</td>
<td>38%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>28,451</td>
<td>55,352</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,840</td>
<td>4,233</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>945</td>
<td>1,887</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,527</td>
<td>5,190</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
### Cambodia

Projected numbers of adults and children with high Body Mass Index (BMI)

![Graph showing projected numbers of adults and children with high BMI](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>1,250,000</td>
<td>2,500,000</td>
</tr>
<tr>
<td>2025</td>
<td>3,750,000</td>
<td>7,500,000</td>
</tr>
<tr>
<td>2030</td>
<td>5,250,000</td>
<td>10,000,000</td>
</tr>
<tr>
<td>2035</td>
<td>6,000,000</td>
<td>12,000,000</td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>187,918</td>
<td>5,254</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>46,270</td>
<td>894</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>30,667</td>
<td>1,054</td>
</tr>
<tr>
<td>of which stroke</td>
<td>59,862</td>
<td>1,781</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>9,849</td>
<td>339</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>16%</td>
<td>39%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>729,100</td>
<td>1,845,429</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>48,784</td>
<td>140,476</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>24,347</td>
<td>62,862</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>65,446</td>
<td>172,759</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas (2020) (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of alcohol 2021 (liters per capita per day)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### References

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
2. See methodology sections of the World Obesity Federation Atlas 2024.
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Type of NCD</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>461,063</td>
<td>13,523</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>109,804</td>
<td>2,831</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>78,852</td>
<td>2,822</td>
</tr>
<tr>
<td>of which stroke</td>
<td>134,961</td>
<td>3,759</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>16,710</td>
<td>629</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Type of NCD</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>6,900</td>
<td>18,900</td>
</tr>
<tr>
<td>Stroke</td>
<td>7,100</td>
<td>19,100</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>7,200</td>
<td>19,200</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6,700</td>
<td>18,700</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>6,600</td>
<td>18,600</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Type of NCD</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>17%</td>
<td>33%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,660,826</td>
<td>4,544,634</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>99,397</td>
<td>319,803</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>54,608</td>
<td>152,904</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>144,175</td>
<td>414,512</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>57.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>28.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>11.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) See methodology sections of the World Obesity Federation Atlas 2024
(2) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(3) High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>832,147</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>162,509</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>202,183</td>
</tr>
<tr>
<td>of which stroke</td>
<td>90,296</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>122,109</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>29,814</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,230</td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>10,318</td>
<td></td>
</tr>
<tr>
<td>of which stroke</td>
<td>2,872</td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>5,726</td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>37%</td>
<td>48%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,307,815</td>
<td>2,915,844</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>186,018</td>
<td>266,482</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>79,364</td>
<td>102,562</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>220,370</td>
<td>291,584</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>15.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.5</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>81.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>21.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>28.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>76.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>66.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>50.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>48,474</td>
<td>1,323</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>11,766</td>
<td>237</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>7,677</td>
<td>240</td>
</tr>
<tr>
<td>of which stroke</td>
<td>14,664</td>
<td>406</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,258</td>
<td>42</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All NCDs</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>298,302</td>
<td>902,497</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>17,688</td>
<td>64,020</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>9,796</td>
<td>30,402</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>25,827</td>
<td>82,530</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>42.2</td>
<td>1.51</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>14.3</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>14.3</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>19.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>96,937</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>21,272</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>15,554</td>
</tr>
<tr>
<td>of which stroke</td>
<td>31,330</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,815</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,250</td>
<td>1,500</td>
<td>750</td>
<td>960</td>
<td>900</td>
</tr>
<tr>
<td>1,950</td>
<td>1,300</td>
<td>650</td>
<td>720</td>
<td>680</td>
</tr>
<tr>
<td>1,650</td>
<td>1,100</td>
<td>550</td>
<td>620</td>
<td>580</td>
</tr>
<tr>
<td>1,350</td>
<td>900</td>
<td>450</td>
<td>520</td>
<td>480</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>727,248</td>
<td>2,462,017</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>38,272</td>
<td>145,223</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>23,530</td>
<td>80,796</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>60,935</td>
<td>212,837</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | n/a |
| Annual increase in GHG emissions 2000–2015 (%) | n/a |
| Proportion of the population living in urban areas 2020 (%) | 23.5 |
| Annual increase in urbanisation 1995–2020 (%) | 0.36 |
| Plastic waste (latest year) (kg per capita) | 6.9 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 23.3 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 28.3 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 10.0 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>422,597</td>
<td>14,095</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>105,491</td>
<td>1,799</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>64,129</td>
<td>2,849</td>
</tr>
<tr>
<td>of which stroke</td>
<td>67,045</td>
<td>2,262</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>50,611</td>
<td>2,337</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCD Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>422,597</td>
<td>14,095</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>105,491</td>
<td>1,799</td>
</tr>
<tr>
<td>Stroke</td>
<td>64,129</td>
<td>2,849</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>67,045</td>
<td>2,262</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>50,611</td>
<td>2,337</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>38%</td>
<td>49%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,415,728</td>
<td>1,630,339</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>118,952</td>
<td>150,706</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>49,038</td>
<td>57,470</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>137,210</td>
<td>163,748</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2015</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent (tonnes per capita per year)</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>87.7</td>
<td>87.7</td>
<td>87.7</td>
<td>87.7</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>36.4</td>
<td>36.4</td>
<td>36.4</td>
<td>36.4</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>26.6</td>
<td>26.6</td>
<td>26.6</td>
<td>26.6</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>87.6</td>
<td>87.6</td>
<td>87.6</td>
<td>87.6</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>60.0</td>
<td>60.0</td>
<td>60.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>46.2</td>
<td>46.2</td>
<td>46.2</td>
<td>46.2</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>24,815,266</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,737,576</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>5,073,254</td>
</tr>
<tr>
<td>of which stroke</td>
<td>8,188,302</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,669,799</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>37%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)

Annual increase in GHG emissions 2000–2015 (%)

Proportion of the population living in urban areas 2020 (%)

Annual increase in urbanisation 1995–2020 (%)

Plastic waste (latest year) (kg per capita)

Proportion of adults taking insufficient physical activity 2016 (%)

Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)

Consumption of animal proteins 2021 (grams per capita per day)

Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024.

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td></td>
</tr>
<tr>
<td>of which stroke</td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>12%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>101,114</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>14,560</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,943</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>12,336</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 5.9 |
| Annual increase in GHG emissions 2000–2015 (%) | -0.2 |
| Proportion of the population living in urban areas 2020 (%) | n/a |
| Annual increase in urbanisation 1995–2020 (%) | n/a |
| Plastic waste (latest year) (kg per capita) | 163.3 |
| Proportion of adults taking insufficient physical activity 2016 (%) | n/a |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 103.3 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 47.0 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Colombia

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>903,543</td>
<td>25,729</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>282,351</td>
<td>3,275</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>182,346</td>
<td>8,104</td>
</tr>
<tr>
<td>of which stroke</td>
<td>118,093</td>
<td>3,655</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>54,278</td>
<td>2,287</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>226,394</td>
<td>345,282</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>111,540</td>
<td>149,098</td>
</tr>
<tr>
<td>Stroke</td>
<td>300,578</td>
<td>412,910</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>1,875</td>
<td>1,307</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>29%</td>
<td>42%</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>11%</td>
<td>18%</td>
</tr>
<tr>
<td>of which stroke</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Metric</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>81.4</td>
<td>81.4</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>33.6</td>
<td>33.6</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>44.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.0</td>
<td>84.0</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>44.9</td>
<td>44.9</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>57.7</td>
<td>57.7</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
### Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>75,000</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>150,000</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>225,000</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>300,000</td>
<td></td>
</tr>
</tbody>
</table>

### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>9,955</td>
<td>309</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,102</td>
<td>52</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,726</td>
<td>61</td>
</tr>
<tr>
<td>of which stroke</td>
<td>2,771</td>
<td>81</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>519</td>
<td>19</td>
</tr>
</tbody>
</table>

### Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)}\)\(^{(2)}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>16%</td>
<td>32%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>43,422</td>
<td>107,019</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,638</td>
<td>7,861</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,431</td>
<td>3,625</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,786</td>
<td>9,899</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity\(^{(2)}\)\(^{(3)}\)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td></td>
<td></td>
<td></td>
<td>29.4</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
<td></td>
<td></td>
<td>0.15</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td></td>
<td></td>
<td></td>
<td>5.9</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
<td></td>
<td></td>
<td>14.3</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
<td></td>
<td></td>
<td>24.5</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td></td>
<td></td>
<td>20.4</td>
</tr>
</tbody>
</table>

### REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
2. See methodology sections of the World Obesity Federation Atlas 2024
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

World Bank data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>106,948</td>
<td>3,043</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>27,937</td>
<td>589</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>19,382</td>
<td>654</td>
</tr>
<tr>
<td>of which stroke</td>
<td>27,378</td>
<td>778</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>4,231</td>
<td>150</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>281,282</td>
<td>722,524</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>15,719</td>
<td>49,504</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>9,167</td>
<td>24,212</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>23,951</td>
<td>65,341</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>67.8</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>28.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>29.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>10.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>101,197</td>
<td>2,804</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>29,227</td>
<td>276</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>19,702</td>
<td>831</td>
</tr>
<tr>
<td>of which stroke</td>
<td>9,926</td>
<td>302</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,016</td>
<td>336</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>436,819</td>
<td>571,508</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>35,572</td>
<td>54,643</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>15,048</td>
<td>20,278</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>41,863</td>
<td>58,160</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>80.8</td>
<td>80.8</td>
<td>80.8</td>
<td>80.8</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>1.58</td>
<td>1.58</td>
<td>1.58</td>
<td>1.58</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>33.8</td>
<td>33.8</td>
<td>33.8</td>
<td>33.8</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>46.1</td>
<td>46.1</td>
<td>46.1</td>
<td>46.1</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>53.1</td>
<td>53.1</td>
<td>53.1</td>
<td>53.1</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>45.1</td>
<td>45.1</td>
<td>45.1</td>
<td>45.1</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Côte d’Ivoire

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,679,686</td>
<td>4,428,142</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>110,460</td>
<td>347,896</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>55,950</td>
<td>151,624</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>149,966</td>
<td>419,062</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>311,328</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>70,111</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>57,700</td>
</tr>
<tr>
<td>of which stroke</td>
<td>91,593</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>11,422</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>6,750</td>
</tr>
<tr>
<td>of which Neoplasms</td>
<td>3,400</td>
</tr>
<tr>
<td>of which Stroke</td>
<td>1,750</td>
</tr>
<tr>
<td>of which Coronary HD</td>
<td>850</td>
</tr>
<tr>
<td>of which Diabetes HD</td>
<td>450</td>
</tr>
<tr>
<td>of which All other NCDs</td>
<td>250</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Croatia

Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>2,200,000</td>
<td>1,650,000</td>
<td>1,100,000</td>
<td>550,000</td>
</tr>
<tr>
<td>Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>189,461</td>
<td>7,659</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>36,800</td>
<td>545</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>52,156</td>
<td>2,916</td>
</tr>
<tr>
<td>of which stroke</td>
<td>33,594</td>
<td>1,389</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>20,353</td>
<td>979</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All other NCDs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>33%</td>
<td>53%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>199,841</td>
<td>265,134</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>16,400</td>
<td>26,268</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>6,894</td>
<td>9,401</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>19,205</td>
<td>26,947</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>57.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>101.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>31.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>76.8</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>68.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>70.3</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>382,065</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>97,464</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>95,112</td>
</tr>
<tr>
<td>of which stroke</td>
<td>58,574</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>34,294</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>9,976</td>
<td>11,590</td>
</tr>
<tr>
<td>Stroke</td>
<td>3,052</td>
<td>3,715</td>
</tr>
<tr>
<td>Coronal HD</td>
<td>3,052</td>
<td>3,715</td>
</tr>
<tr>
<td>Diabetes</td>
<td>2,523</td>
<td>3,025</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>1,092</td>
<td>1,245</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>24%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>274,778</td>
<td>367,695</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>39,568</td>
<td>52,948</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>10,716</td>
<td>14,340</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>33,523</td>
<td>44,859</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>77.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>22.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>36.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>33.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>51.9</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

![Graph showing projected numbers of adults and children with high BMI from 2020 to 2035.](image)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>23,224</td>
<td>802</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>6,836</td>
<td>154</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>5,650</td>
<td>251</td>
</tr>
<tr>
<td>of which stroke</td>
<td>2,285</td>
<td>83</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,931</td>
<td>90</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>41%</td>
<td>54%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>79,271</td>
<td>104,038</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>6,213</td>
<td>8,950</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>2,713</td>
<td>3,619</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>7,496</td>
<td>10,170</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>7.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
<td>-1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>66.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
<td>-0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>94.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>44.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>58.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>66.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI) for Czechia

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>482,868</td>
<td>17,453</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

Environmental correlates of obesity

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI ≥1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>728,282</td>
<td>20,730</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>187,248</td>
<td>3,567</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>114,525</td>
<td>3,888</td>
</tr>
<tr>
<td>of which stroke</td>
<td>193,303</td>
<td>5,649</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>22,485</td>
<td>807</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>13%</td>
<td>29%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,610,399</td>
<td>16,883,688</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>271,453</td>
<td>1,174,606</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>151,264</td>
<td>567,071</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>398,356</td>
<td>1,534,304</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>13%</td>
<td>29%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,610,399</td>
<td>16,883,688</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>271,453</td>
<td>1,174,606</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>151,264</td>
<td>567,071</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>398,356</td>
<td>1,534,304</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 0.0 |
Annual increase in GHG emissions 2000–2015 (%) | 4.5 |
Proportion of the population living in urban areas 2020 (%) | 45.6 |
Annual increase in urbanisation 1995–2020 (%) | 1.33 |
Plastic waste (latest year) (kg per capita) | n/a |
Proportion of adults taking insufficient physical activity 2016 (%) | 23.9 |
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
Consumption of animal proteins 2021 (grams per capita per day) | 3.2 |
Consumption of sugar and sweeteners 2021 (kg per capita per year) | 2.3 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
### Denmark

**Projected numbers of adults and children with high Body Mass Index (BMI)**

- **Adults**
- **Children**

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>3,000,000</td>
<td>2,000,000</td>
</tr>
<tr>
<td>2025</td>
<td>4,000,000</td>
<td>3,000,000</td>
</tr>
<tr>
<td>2030</td>
<td>5,000,000</td>
<td>4,000,000</td>
</tr>
<tr>
<td>2035</td>
<td>6,000,000</td>
<td>5,000,000</td>
</tr>
</tbody>
</table>

---

**Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019**

<table>
<thead>
<tr>
<th>Cause of NCD</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>107,027</td>
<td>4,128</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>22,468</td>
<td>519</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>19,469</td>
<td>1,107</td>
</tr>
<tr>
<td>of which stroke</td>
<td>14,494</td>
<td>568</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>17,176</td>
<td>856</td>
</tr>
</tbody>
</table>

---

**Deaths from NCDs due to high BMI in adults 2019**

- **Neoplasms**
- **Stroke**
- **Coronary HD**
- **Diabetes**
- **All other NCDs**

<table>
<thead>
<tr>
<th>Cause of NCD</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>3,750</td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td>1,250</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>All other NCDs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Early signs of NCDs in children aged 5–19 years, 2020 and 2035**

- **Prevalence of children with high BMI**
  - 2020: 29%
  - 2035: 34%

- **Numbers of children with high BMI**
  - 2020: 285,343
  - 2035: 338,501

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>29%</td>
<td>285,343</td>
</tr>
<tr>
<td>2035</td>
<td>34%</td>
<td>338,501</td>
</tr>
</tbody>
</table>

- **of which, children with high blood pressure attributable to high BMI**
  - 2020: 19,338
  - 2035: 24,451

- **of which, children with hyperglycaemia attributable to high BMI**
  - 2020: 9,546
  - 2035: 11,435

- **of which, children with low HDL cholesterol attributable to high BMI**
  - 2020: 25,716
  - 2035: 31,138

---

**Environmental correlates of obesity**

- **Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)**
  - Denmark: 5.7

- **Proportion of the population living in urban areas 2020 (%)**
  - Denmark: 88.1

- **Plastic waste (latest year) (kg per capita)**
  - Denmark: 13.6

- **Proportion of adults taking insufficient physical activity 2016 (%)**
  - Denmark: 28.5

- **Consumption of animal proteins 2021 (grams per capita per day)**
  - Denmark: 84.5

- **Consumption of sugar and sweeteners 2021 (kg per capita per year)**
  - Denmark: 54.7

---

**REFERENCES:**

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>13,212</td>
<td>359</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,275</td>
<td>71</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,291</td>
<td>73</td>
</tr>
<tr>
<td>of which stroke</td>
<td>3,719</td>
<td>101</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>674</td>
<td>23</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>6%</td>
<td>11%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>21,582</td>
<td>40,308</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>3,108</td>
<td>5,804</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>842</td>
<td>1,572</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,633</td>
<td>4,918</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>78.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>85.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>16.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>47.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. See methodology sections of the World Obesity Federation Atlas 2024
4. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>309,807</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>66,978</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>94,161</td>
</tr>
<tr>
<td>of which stroke</td>
<td>70,763</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>14,237</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,500</td>
<td>5,000</td>
<td>2,500</td>
<td>750</td>
<td>0</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>40%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,191,575</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>105,205</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>41,644</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>117,613</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 2.1 |
| Annual increase in GHG emissions 2000–2015 (%) | 0.0 |
| Proportion of the population living in urban areas 2020 (%) | 82.5 |
| Annual increase in urbanisation 1995–2020 (%) | 1.45 |
| Plastic waste (latest year) (kg per capita) | 38.6 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 39.0 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 41.6 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 44.6 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Ecuador

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>432,148</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>123,881</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>74,581</td>
</tr>
<tr>
<td>of which stroke</td>
<td>65,759</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>26,661</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>13,453</td>
<td>19,347</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,794</td>
<td>3,789</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,781</td>
<td>2,781</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,861</td>
<td>1,861</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,060</td>
<td>1,060</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>34%</td>
<td>52%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,621,261</td>
<td>2,294,498</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>119,115</td>
<td>193,475</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>54,913</td>
<td>79,527</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>149,976</td>
<td>222,666</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>2.3%</td>
<td>2.3%</td>
<td>2.3%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>64.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.42%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>37.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>27.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>86.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>36.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>74.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>4,209,720</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>636,508</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,825,286</td>
</tr>
<tr>
<td>of which stroke</td>
<td>649,550</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>175,508</td>
</tr>
<tr>
<td></td>
<td>130,323</td>
</tr>
<tr>
<td></td>
<td>13,420</td>
</tr>
<tr>
<td></td>
<td>64,467</td>
</tr>
<tr>
<td></td>
<td>17,260</td>
</tr>
<tr>
<td></td>
<td>6,078</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>43%</td>
<td>63%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>14,103,252</td>
<td>23,506,255</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,274,257</td>
<td>2,351,403</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>495,001</td>
<td>841,580</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,404,196</td>
<td>2,435,573</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of youth aged 11–19 years taking insufficient physical activity 2016 (%)</td>
<td>31.0</td>
<td>31.0</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>87.5</td>
<td>87.5</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>23.6</td>
<td>23.6</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 2.0
- Annual increase in GHG emissions 2000–2015 (%): 2.5
- Proportion of the population living in urban areas 2020 (%): 42.8
- Annual increase in urbanisation 1995–2020 (%): 0.00
- Proportion of adults taking insufficient physical activity 2016 (%): 31.0
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): 87.5
- Consumption of animal proteins 2021 (grams per capita per day): 27.5
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 23.6

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
El Salvador

Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>168,628</td>
<td>5,259</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>55,157</td>
<td>1,158</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>30,145</td>
<td>1,314</td>
</tr>
<tr>
<td>of which stroke</td>
<td>15,439</td>
<td>476</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>6,602</td>
<td>276</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>1,500</td>
<td>3,000</td>
</tr>
<tr>
<td>Stroke</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>4,500</td>
<td>9,000</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6,000</td>
<td>12,000</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>1,500</td>
<td>3,000</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>38%</td>
<td>58%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>659,757</td>
<td>852,181</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>53,173</td>
<td>79,689</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>22,688</td>
<td>30,106</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>62,997</td>
<td>85,974</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>1.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>73.4</td>
<td>1.24</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>26.7</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>86.1</td>
<td>36.4</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>34.3</td>
<td>36.4</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Equatorial Guinea

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYS) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17,360</td>
<td>506</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>5,406</td>
<td>120</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,492</td>
<td>91</td>
</tr>
<tr>
<td>of which stroke</td>
<td>3,749</td>
<td>106</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>912</td>
<td>34</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Environment correlates of obesity

<table>
<thead>
<tr>
<th>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual increase in GHG emissions 2000–2015 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.7</td>
<td>10.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of the population living in urban areas 2020 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>73.1</td>
<td>73.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual increase in urbanisation 1995–2020 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.39</td>
<td>2.39</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plastic waste (latest year) (kg per capita)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of adults taking insufficient physical activity 2016 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumption of animal proteins 2021 (grams per capita per day)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumption of sugar and sweeteners 2021 (kg per capita per year)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024.
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>55,698</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>13,381</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>7,761</td>
</tr>
<tr>
<td>of which stroke</td>
<td>16,419</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,566</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,684</td>
<td>326</td>
<td>262</td>
<td>486</td>
<td>92</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>37,776</td>
<td>141,584</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>5,440</td>
<td>20,388</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,473</td>
<td>5,522</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>4,609</td>
<td>17,273</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 0.1 |
| Annual increase in GHG emissions 2000–2015 (%) | -3.6 |
| Proportion of the population living in urban areas 2020 (%) | 41.3 |
| Annual increase in urbanisation 1995–2020 (%) | 2.46 |
| Plastic waste (latest year) (kg per capita) | n/a |
| Proportion of adults taking insufficient physical activity 2016 (%) | 22.4 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | n/a |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | n/a |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th></th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>700,000</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>525,000</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>350,000</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>175,000</td>
<td></td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>62,460</td>
<td>3,026</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>6,693</td>
<td>73</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>16,976</td>
<td>1,016</td>
</tr>
<tr>
<td>of which stroke</td>
<td>6,639</td>
<td>241</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>5,740</td>
<td>281</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other NCDs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>22%</td>
<td>29%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>46,320</td>
<td>56,881</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>3,159</td>
<td>4,305</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,551</td>
<td>1,936</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>4,183</td>
<td>5,314</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td></td>
<td>10.8</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>69.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.06</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>68.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>32.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.1</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>78.8</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>80.4</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Eswatini

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>39,266</td>
<td>1,279</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>14,463</td>
<td>457</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>5,274</td>
<td>187</td>
</tr>
<tr>
<td>of which stroke</td>
<td>7,083</td>
<td>227</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,592</td>
<td>91</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>87,399</td>
<td>205,835</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>6,936</td>
<td>20,398</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>2,998</td>
<td>7,355</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>8,300</td>
<td>21,247</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environment correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-1.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>24.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>28.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>19.1</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>50.5</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024.
Ethiopia

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>521,810</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>123,531</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>84,265</td>
</tr>
<tr>
<td>of which stroke</td>
<td>145,719</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>18,343</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths from NCDs due to high BMI in 2019</td>
<td></td>
</tr>
<tr>
<td>All non-communicable diseases</td>
<td>14,946</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,866</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,808</td>
</tr>
<tr>
<td>of which stroke</td>
<td>4,028</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>664</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,725,842</td>
<td>13,653,668</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>217,838</td>
<td>682,576</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>150,658</td>
<td>439,144</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>383,067</td>
<td>1,128,989</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 0.1 |
| Annual increase in GHG emissions 2000–2015 (%) | 4.9 |
| Proportion of the population living in urban areas 2020 (%) | 21.7 |
| Annual increase in urbanisation 1995–2020 (%) | 1.83 |
| Plastic waste (latest year) (kg per capita) | 1.5 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 14.9 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 7.2 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 7.9 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Condition</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>80,501</td>
<td>2,352</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>40,634</td>
<td>1,144</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>16,920</td>
<td>543</td>
</tr>
<tr>
<td>of which stroke</td>
<td>8,853</td>
<td>243</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,421</td>
<td>85</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>104,186</td>
<td>150,584</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>7,673</td>
<td>12,978</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,530</td>
<td>5,240</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>9,645</td>
<td>14,731</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas (2020) (%)</td>
<td>75.0</td>
<td>57.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>16.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity (2016) (%)</td>
<td>17.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity (2016) (%)</td>
<td>83.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>36.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>144.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td></td>
</tr>
<tr>
<td>138,503</td>
<td>5,581</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>27,864</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>38,269</td>
</tr>
<tr>
<td>of which stroke</td>
<td>16,956</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>16,164</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,500</td>
<td>3,000</td>
<td>4,500</td>
<td>6,000</td>
<td>138,503</td>
</tr>
<tr>
<td>27,864</td>
<td>38,269</td>
<td>16,956</td>
<td>16,164</td>
<td>5,581</td>
</tr>
<tr>
<td>21,668</td>
<td>24,809</td>
<td>10,557</td>
<td>29,331</td>
<td>2,348</td>
</tr>
<tr>
<td>9,975</td>
<td>10,557</td>
<td>668</td>
<td>24,809</td>
<td>2,348</td>
</tr>
<tr>
<td>27,250</td>
<td>29,331</td>
<td>2,348</td>
<td>24,809</td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32%</td>
<td>41%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>294,410</td>
<td>306,818</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>21,668</td>
<td>24,809</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>9,975</td>
<td>10,557</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>27,250</td>
<td>29,331</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 7.7 |
| Annual increase in GHG emissions 2000–2015 (%) | -2.1 |
| Proportion of the population living in urban areas 2020 (%) | 85.5 |
| Annual increase in urbanisation 1995–2020 (%) | 0.22 |
| Plastic waste (latest year) (kg per capita) | 8.2 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 16.6 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 75.4 |
| Consumption of animal proteins 2021 (grams per capita per day) | 79.6 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 48.4 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease Type</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,094,365</td>
<td>46,898</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>177,781</td>
<td>4,462</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>179,767</td>
<td>10,508</td>
</tr>
<tr>
<td>of which stroke</td>
<td>128,679</td>
<td>4,938</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>194,569</td>
<td>10,247</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Disease Type</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>37,500</td>
<td>42,714</td>
</tr>
<tr>
<td>Diabetes</td>
<td>3,865,973</td>
<td>4,287,714</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>252,156</td>
<td>304,696</td>
</tr>
<tr>
<td>Stroke</td>
<td>128,624</td>
<td>144,477</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>344,294</td>
<td>392,321</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>33%</td>
<td>3,865,973</td>
</tr>
<tr>
<td>2035</td>
<td>40%</td>
<td>4,287,714</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td></td>
<td>252,156</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td></td>
<td>128,624</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td></td>
<td>344,294</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
French Polynesia

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>34%</td>
<td>52%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>23,451</td>
<td>30,034</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>3,377</td>
<td>4,325</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>915</td>
<td>1,171</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,861</td>
<td>3,664</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>10.7</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>68.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>36.2</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Gabon

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42,665</td>
<td>1,309</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>13,489</td>
<td>323</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>6,776</td>
<td>247</td>
</tr>
<tr>
<td>of which stroke</td>
<td>8,479</td>
<td>254</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,287</td>
<td>85</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21%</td>
<td>39%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>156,912</td>
<td>365,775</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>10,376</td>
<td>28,400</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>5,231</td>
<td>12,500</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>14,033</td>
<td>34,475</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | n/a |
| Annual increase in GHG emissions 2000–2015 (%) | 1.6 |
| Proportion of the population living in urban areas 2020 (%) | 2.2 |
| Annual increase in urbanisation 1995–2020 (%) | 90.1 |
| Plastic waste (latest year) (kg per capita) | 0.75 |
| Proportion of adults taking insufficient physical activity 2016 (%) | n/a |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 25.3 |
| Consumption of animal proteins 2021 (grams per capita per day) | n/a |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 44.9 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024.

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projecting numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>29,056</td>
<td>855</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>5,472</td>
<td>129</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>5,939</td>
<td>212</td>
</tr>
<tr>
<td>of which stroke</td>
<td>8,147</td>
<td>226</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,345</td>
<td>74</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

Environmental correlates of obesity

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024.
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>211,842</td>
<td>8,568</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>35,767</td>
<td>677</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>61,110</td>
<td>2,899</td>
</tr>
<tr>
<td>of which stroke</td>
<td>54,875</td>
<td>2,072</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>10,710</td>
<td>429</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
<th>of which, children with high blood pressure attributable to high BMI</th>
<th>of which, children with hyperglycaemia attributable to high BMI</th>
<th>of which, children with low HDL cholesterol attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>22%</td>
<td>161,683</td>
<td>11,390</td>
<td>5,441</td>
<td>14,752</td>
</tr>
<tr>
<td>2035</td>
<td>33%</td>
<td>234,449</td>
<td>18,723</td>
<td>8,050</td>
<td>22,314</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
<td>4.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td></td>
<td>59.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
<td>0.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td></td>
<td>6.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>18.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
<td>39.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td>45.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI ≥ 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>2,491,130</td>
<td>106,142</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>568,322</td>
<td>8,703</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>547,496</td>
<td>32,620</td>
</tr>
<tr>
<td>of which stroke</td>
<td>237,349</td>
<td>9,331</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>313,168</td>
<td>16,216</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>42,2</td>
<td>83,7</td>
</tr>
<tr>
<td>Stroke</td>
<td>83,7</td>
<td>16,2</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>79,2</td>
<td>37,7</td>
</tr>
<tr>
<td>Diabetes</td>
<td>77,5</td>
<td>30,0</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>30,0</td>
<td>12,5</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30%</td>
<td>37%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,385,315</td>
<td>4,242,580</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>246,477</td>
<td>334,513</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>114,499</td>
<td>145,357</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>312,223</td>
<td>402,002</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>8.9</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>77.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>79.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>42.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>83.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>73.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>48.9</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(4) High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>599,902</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>139,306</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>109,448</td>
</tr>
<tr>
<td>of which stroke</td>
<td>192,181</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>23,713</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>89,842</td>
<td>247,316</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>50,926</td>
<td>123,533</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>133,711</td>
<td>332,006</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>57.3</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.44</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>21.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>87.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>19.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>18.4</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>302,971</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>49,743</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>85,144</td>
</tr>
<tr>
<td>of which stroke</td>
<td>46,879</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>29,173</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,080</td>
<td>5,065</td>
<td>4,577</td>
<td>555</td>
<td>2,212</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>658,884</td>
<td>616,259</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 6.0 |
| Annual increase in GHG emissions 2000–2015 (%) | -2.0 |
| Proportion of the population living in urban areas 2020 (%) | 79.7 |
| Annual increase in urbanisation 1995–2020 (%) | 0.40 |
| Plastic waste (latest year) (kg per capita) | 73.4 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 37.7 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 84.5 |
| Consumption of animal proteins 2021 (grams per capita per day) | 65.8 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 41.5 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>4,264</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,599</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>597</td>
</tr>
<tr>
<td>of which stroke</td>
<td>681</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>289</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>126</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>36</td>
</tr>
<tr>
<td>of which stroke</td>
<td>23</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>11</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>14%</td>
<td>30%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,043</td>
<td>8,706</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>582</td>
<td>1,254</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>158</td>
<td>340</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>493</td>
<td>1,062</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>45.9</td>
<td>28.7</td>
<td>84.3</td>
<td>60.2</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>309,382</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>140,973</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>41,486</td>
</tr>
<tr>
<td>of which stroke</td>
<td>36,176</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>10,815</td>
</tr>
<tr>
<td></td>
<td>8,172</td>
</tr>
<tr>
<td></td>
<td>2,985</td>
</tr>
<tr>
<td></td>
<td>1,521</td>
</tr>
<tr>
<td></td>
<td>981</td>
</tr>
<tr>
<td></td>
<td>405</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>35%</th>
<th>55%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,978,192</td>
<td>3,127,764</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>149,073</td>
<td>276,566</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>67,274</td>
<td>109,340</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>184,556</td>
<td>308,894</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

| Greenhouse gas (GHG) emissions CO\(_2\) equivalent 2015 (tonnes per capita per year) | 1.0 |
| Annual increase in GHG emissions 2000–2015 (%) | 1.8 |
| Proportion of the population living in urban areas 2020 (%) | 51.8 |
| Annual increase in urbanisation 1995–2020 (%) | 0.68 |
| Plastic waste (latest year) (kg per capita) | 29.3 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 37.1 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 86.9 |
| Consumption of animal proteins 2021 (grams per capita per day) | 28.7 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 56.2 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Guinea

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>131,040</td>
<td>3,906</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>27,387</td>
<td>671</td>
</tr>
<tr>
<td>Coronary (ischaemic) heart disease</td>
<td>21,943</td>
<td>794</td>
</tr>
<tr>
<td>Stroke</td>
<td>38,767</td>
<td>1,095</td>
</tr>
<tr>
<td>Cancers (neoplasms)</td>
<td>7,269</td>
<td>256</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>3,906</td>
<td>102,075</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>671</td>
<td>54,788</td>
</tr>
<tr>
<td>Stroke</td>
<td>794</td>
<td>145,264</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>1,095</td>
<td>1,660,320</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>256</td>
<td>3,906</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>598,688</td>
<td>1,660,320</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>32,095</td>
<td>102,075</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>19,413</td>
<td>54,788</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>50,410</td>
<td>145,264</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>36.9</td>
<td>0.90</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.9</td>
<td>14.5</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>14.1</td>
<td>18.5</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. See methodology sections of the World Obesity Federation Atlas 2024
4. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>22,570</td>
<td>618</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>4,775</td>
<td>111</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>4,265</td>
<td>138</td>
</tr>
<tr>
<td>of which stroke</td>
<td>7,296</td>
<td>192</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>641</td>
<td>22</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other NCDs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>33%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>111,881</td>
<td>307,055</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>6,599</td>
<td>21,366</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,672</td>
<td>10,313</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>9,672</td>
<td>27,905</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>44.2</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.01</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>9.4</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>10.7</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>38,819</td>
<td>1,129</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>13,183</td>
<td>300</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>7,364</td>
<td>258</td>
</tr>
<tr>
<td>of which stroke</td>
<td>7,928</td>
<td>249</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,139</td>
<td>40</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Cause</th>
<th>Person-years lost (DALYs)</th>
<th>Deaths (NCDs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>1,229</td>
<td>375</td>
</tr>
<tr>
<td>Stroke</td>
<td>822</td>
<td>221</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>844</td>
<td>221</td>
</tr>
<tr>
<td>Diabetes</td>
<td>600</td>
<td>175</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>8,300</td>
<td>2,410</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2035</td>
</tr>
<tr>
<td>Prevalence of children with high BMI</td>
<td>13%</td>
<td>29%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>29,328</td>
<td>65,325</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>4,223</td>
<td>9,407</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,144</td>
<td>2,548</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,578</td>
<td>7,790</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td></td>
<td>26.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
<td>-0.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td></td>
<td>34.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>84.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
<td>53.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td>67.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
115

**Haiti**

Projected numbers of adults and children with high Body Mass Index (BMI)

- **Adults**
  - 2020: 1,750,000
  - 2025: 3,500,000
  - 2030: 5,250,000
  - 2035: 7,000,000

- **Children**
  - 2020: 1,750,000
  - 2025: 3,500,000
  - 2030: 5,250,000
  - 2035: 7,000,000

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>209,210</td>
<td>5,584</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>64,517</td>
<td>1,247</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>38,404</td>
<td>1,293</td>
</tr>
<tr>
<td>of which stroke</td>
<td>57,735</td>
<td>1,640</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>5,223</td>
<td>187</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- **Neoplasms**
  - 2020: 202,310
  - 2035: 404,620

- **Stroke**
  - 2020: 10,920
  - 2035: 21,840

- **Coronary HD**
  - 2020: 13,400
  - 2035: 26,800

- **Diabetes**
  - 2020: 19,200
  - 2035: 38,400

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1,2)}\)

<table>
<thead>
<tr>
<th>Prevalence / Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevalence of children with high BMI</strong></td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Numbers of children with high BMI</strong></td>
<td>1,280,701</td>
<td>2,431,869</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>105,082</td>
<td>241,160</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>44,177</td>
<td>86,914</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>123,067</td>
<td>251,094</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2,3)}\)

<table>
<thead>
<tr>
<th>Correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>57.1</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.27</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>27.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>13.2</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>24.6</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>192,287</td>
<td>5,620</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>45,002</td>
<td>541</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>36,238</td>
<td>1,484</td>
</tr>
<tr>
<td>of which stroke</td>
<td>41,483</td>
<td>1,341</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>9,948</td>
<td>392</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>34%</td>
<td>56%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,081,522</td>
<td>1,810,684</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>82,553</td>
<td>163,590</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>36,857</td>
<td>63,551</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>101,341</td>
<td>180,278</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year)</td>
<td>1.1</td>
<td>1.5</td>
<td>1.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.0</td>
<td>3.5</td>
<td>4.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>58.4</td>
<td>59.5</td>
<td>60.6</td>
<td>61.7</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.24</td>
<td>1.49</td>
<td>1.74</td>
<td>2.00</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>34.2</td>
<td>35.4</td>
<td>36.6</td>
<td>37.8</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>83.8</td>
<td>85.5</td>
<td>87.2</td>
<td>89.0</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>25.9</td>
<td>26.8</td>
<td>27.7</td>
<td>28.6</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>50.6</td>
<td>52.2</td>
<td>53.8</td>
<td>55.4</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>5,825</td>
<td>204</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,156</td>
<td>10</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,443</td>
<td>79</td>
</tr>
<tr>
<td>of which stroke</td>
<td>543</td>
<td>19</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>791</td>
<td>38</td>
</tr>
</tbody>
</table>

### Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>250</td>
<td>280</td>
</tr>
<tr>
<td>Diabetes</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>56</td>
<td>63</td>
</tr>
<tr>
<td>Stroke</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>Other NCDs</td>
<td>102</td>
<td>112</td>
</tr>
</tbody>
</table>

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>21,916</td>
<td>24,457</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,609</td>
<td>1,916</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>742</td>
<td>837</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,027</td>
<td>2,312</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity

- **Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year):** 6.1
- **Annual increase in GHG emissions 2000–2015 (%):** -1.5
- **Proportion of the population living in urban areas 2020 (%):** 93.9
- **Annual increase in urbanisation 1995–2020 (%):** 0.10
- **Plastic waste (latest year) (kg per capita):** 59.0
- **Proportion of adults taking insufficient physical activity 2016 (%):** n/a
- **Proportion of youth (age 11–19yr) taking insufficient physical activity 2016 (%):** 80.3
- **Consumption of animal proteins 2021 (grams per capita per day):** 100.8
- **Consumption of sugar and sweeteners 2021 (kg per capita per year):** 89.9

### References

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. See methodology sections of the World Obesity Federation Atlas 2024
4. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
7. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td></td>
</tr>
<tr>
<td>of which stroke</td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td></td>
</tr>
<tr>
<td>Prevalence of children with high BMI</td>
<td></td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td></td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td></td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td></td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

Environmental correlates of obesity

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

World Bank data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>7,000,188</td>
<td>186,620</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,864,819</td>
<td>43,848</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,272,494</td>
<td>38,670</td>
</tr>
<tr>
<td>of which stroke</td>
<td>2,325,052</td>
<td>63,499</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>268,006</td>
<td>8,726</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>23%</td>
<td>53%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>15,655,672</td>
<td>35,590,754</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,294,760</td>
<td>3,511,051</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>540,778</td>
<td>1,270,656</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,508,681</td>
<td>3,667,119</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>1.6</td>
<td>2.7</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>56.6</td>
<td>1.82</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>35.0</td>
<td>22.6</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>86.4</td>
<td>29.8</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>27.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>200.0</td>
<td>300.0</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>300.0</td>
<td>400.0</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>400.0</td>
<td>500.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>500.0</td>
<td>600.0</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,986,069</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>473,443</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>603,615</td>
</tr>
<tr>
<td>of which stroke</td>
<td>284,647</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>85,560</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>34%</td>
<td>55%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>6,539,943</td>
<td>9,930,218</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>527,988</td>
<td>956,100</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>224,966</td>
<td>352,817</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>624,845</td>
<td>1,013,330</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,234,666</td>
<td>36,479</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>292,073</td>
<td>5,789</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>390,936</td>
<td>14,395</td>
</tr>
<tr>
<td>of which stroke</td>
<td>297,201</td>
<td>8,591</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>35,904</td>
<td>1,304</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2025</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>37%</td>
<td>481,071</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,564,610</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>193,730</td>
<td>336,839</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>544,967</td>
<td>968,290</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>378,071</td>
<td>712,053</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>70.9</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>19.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>52.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>85.0</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>22.0</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Condition</th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>85,310</td>
<td>2,977</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>15,860</td>
<td>190</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>21,117</td>
<td>1,105</td>
</tr>
<tr>
<td>of which stroke</td>
<td>8,888</td>
<td>324</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>13,061</td>
<td>630</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs)</th>
<th>Deaths from NCDs due to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>1,250</td>
<td>325</td>
</tr>
<tr>
<td>Stroke</td>
<td>1,100</td>
<td>280</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>750</td>
<td>190</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1,100</td>
<td>280</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>750</td>
<td>190</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>37%</td>
<td>372,311</td>
</tr>
<tr>
<td>2035</td>
<td>52%</td>
<td>458,271</td>
</tr>
</tbody>
</table>

- of which, children with high blood pressure attributable to high BMI: 27,158 in 2020, 38,828 in 2035
- of which, children with hyperglycaemia attributable to high BMI: 12,596 in 2020, 15,897 in 2035
- of which, children with low HDL cholesterol attributable to high BMI: 34,359 in 2020, 44,550 in 2035

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-2.3</td>
<td>-3.8</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>63.7</td>
<td>66.2</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.38</td>
<td>0.56</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>74.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>32.7</td>
<td>35.4</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>71.8</td>
<td>74.5</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>87.1</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>88.5</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>137,350</td>
<td>5,134</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>41,182</td>
<td>1,064</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>19,924</td>
<td>1,088</td>
</tr>
<tr>
<td>of which stroke</td>
<td>13,473</td>
<td>485</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>15,832</td>
<td>805</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>849,944</td>
<td>1,19,591</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>61,861</td>
<td>89,285</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>28,746</td>
<td>39,573</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>78,380</td>
<td>108,979</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>92.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>116.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>78.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>60.7</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(4) High BMI data: NCD Risk Factor Collaboration projections by RTI International.
(5) DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
(6) Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
(7) Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,454,677</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>364,711</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>238,909</td>
</tr>
<tr>
<td>of which stroke</td>
<td>140,788</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>178,406</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

| | 2020 | 2035 |
| All non-communicable diseases | 64,136 | 240,101 |
| of which diabetes mellitus | 7,406 | 104,217 |
| of which coronary (ischaemic) heart disease | 15,018 | 6,479 |
| of which stroke | 6,479 | 113,232 |
| of which cancers (neoplasms) | 9,483 | 288,292 |

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

| | 2020 | 2035 |
| Prevalence of children with high BMI | 40% | 49% |
| Numbers of children with high BMI | 3,341,892 | 3,041,124 |
| of which, children with high blood pressure attributable to high BMI | 246,082 | 240,101 |
| of which, children with hyperglycaemia attributable to high BMI | 113,232 | 104,217 |
| of which, children with low HDL cholesterol attributable to high BMI | 309,375 | 288,292 |

Environmental correlates of obesity

| | 2020 | 2025 | 2030 | 2035 |
| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 5.5 | \[\text{Annual growth rate in the projected numbers of adults with high BMI 2020–2035} \] | -0.6% | \[\text{Annual growth rate in the projected numbers of children with high BMI 2020–2035} \] | 0.5% |
| Annual increase in GHG emissions 2000–2015 (%) | -2.0 | | | |
| Proportion of the population living in urban areas 2020 (%) | 71.0 | | | |
| Annual increase in urbanisation 1995–2020 (%) | 0.24 | | | |
| Plastic waste (latest year) (kg per capita) | 57.9 | | | |
| Proportion of adults taking insufficient physical activity 2016 (%) | 41.4 | | | |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 88.6 | | | |
| Consumption of animal proteins 2021 (grams per capita per day) | 69.1 | | | |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 35.4 | | | |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

World Obesity Atlas 2024
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>104,927</td>
<td>3,434</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>42,927</td>
<td>1,169</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>11,060</td>
<td>460</td>
</tr>
<tr>
<td>of which stroke</td>
<td>18,846</td>
<td>655</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>5,529</td>
<td>231</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>36%</td>
<td>55%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>230,111</td>
<td>258,160</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>19,916</td>
<td>25,624</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>8,013</td>
<td>9,228</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>22,545</td>
<td>26,665</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
**Japan**

Projected numbers of adults and children with high Body Mass Index (BMI)

![Graph showing projected numbers of adults and children with high BMI](image)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,360,140</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>228,163</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>166,639</td>
</tr>
<tr>
<td>of which stroke</td>
<td>248,443</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>207,154</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>169,994</td>
<td>167,780</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>90,069</td>
<td>83,781</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>239,376</td>
<td>225,181</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. See methodology sections of the World Obesity Federation Atlas 2024
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>261,802</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>66,817</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>65,979</td>
</tr>
<tr>
<td>of which stroke</td>
<td>38,721</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>11,750</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,500</td>
<td>900</td>
<td>300</td>
<td>1,500</td>
<td>3,000</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>39%</td>
<td>57%</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 2.5 |
| Annual increase in GHG emissions 2000–2015 (%) | -1.2 |
| Proportion of the population living in urban areas 2020 (%) | 91.4 |
| Annual increase in urbanisation 1995–2020 (%) | 0.63 |
| Plastic waste (latest year) (kg per capita) | 48.1 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 11.9 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 84.8 |
| Consumption of animal proteins 2021 (grams per capita per day) | 25.4 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 45.5 |
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>703,012</td>
<td>22,827</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>113,281</td>
<td>1,563</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>213,011</td>
<td>9,167</td>
</tr>
<tr>
<td>of which stroke</td>
<td>213,605</td>
<td>7,062</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>44,396</td>
<td>1,692</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2035</td>
</tr>
<tr>
<td>Prevalence of children with high BMI</td>
<td>22%</td>
<td>32%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,055,005</td>
<td>1,904,446</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>73,948</td>
<td>150,964</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>35,474</td>
<td>65,308</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>96,104</td>
<td>180,790</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>57.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>69.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>27.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
<td>64.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td>37.3</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Kenya

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYS) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>539,114</td>
<td>15,017</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>119,120</td>
<td>2,621</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>80,551</td>
<td>2,593</td>
</tr>
<tr>
<td>of which stroke</td>
<td>163,471</td>
<td>4,529</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>31,391</td>
<td>1,097</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>539,114</td>
<td>15,017</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>119,120</td>
<td>2,621</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>80,551</td>
<td>2,593</td>
</tr>
<tr>
<td>of which stroke</td>
<td>163,471</td>
<td>4,529</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>31,391</td>
<td>1,097</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>32%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,850,477</td>
<td>7,053,534</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>162,128</td>
<td>483,089</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>93,107</td>
<td>236,352</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>243,906</td>
<td>637,799</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

- Greenhouse gas (GHG) emissions CO\(_2\) equivalent 2015 (tonnes per capita per year): 0.3 ton
- Annual increase in GHG emissions 2000–2015 (%): 1.3
- Proportion of the population living in urban areas 2020 (%): 28.0
- Annual increase in urbanisation 1995–2020 (%): 1.72
- Plastic waste (latest year) (kg per capita): 25.3 kg
- Proportion of adults taking insufficient physical activity 2016 (%): 15.4
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): 86.9
- Consumption of animal proteins 2021 (grams per capita per day): 14.7 g
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 23.2 kg

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Kiribati

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

Environmental correlates of obesity(2)(3)

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>108,349</td>
<td>2,316</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>29,193</td>
<td>223</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>36,169</td>
<td>1,089</td>
</tr>
<tr>
<td>of which stroke</td>
<td>13,518</td>
<td>316</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>3,870</td>
<td>148</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>47%</td>
<td>56%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>411,760</td>
<td>395,836</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>40,079</td>
<td>41,303</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>14,661</td>
<td>14,296</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>42,200</td>
<td>41,728</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>116.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>67.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.3</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>62.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>30.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Kyrgyzstan

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>139,974</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>4,479</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>14,930</td>
</tr>
<tr>
<td>of which stroke</td>
<td>52,515</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>44,286</td>
</tr>
<tr>
<td>of which hyperglycaemia attributable to high BMI</td>
<td>5,500</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>3750</td>
<td>2500</td>
<td>1250</td>
<td>450</td>
<td>300</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
<th>of which, children with high blood pressure attributable to high BMI</th>
<th>of which, children with hyperglycaemia attributable to high BMI</th>
<th>of which, children with low HDL cholesterol attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>18%</td>
<td>349,440</td>
<td>21,033</td>
<td>11,498</td>
<td>30,385</td>
</tr>
<tr>
<td>2035</td>
<td>30%</td>
<td>689,225</td>
<td>48,396</td>
<td>23,181</td>
<td>62,820</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>CO2</th>
<th>Greenhouse gas (GHG) emissions CO2 equivalent 2015 (tonnes per capita per year)</th>
<th>1.6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>36.9</td>
</tr>
<tr>
<td></td>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>13.9</td>
</tr>
<tr>
<td></td>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>41.1</td>
</tr>
<tr>
<td></td>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>44.6</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td></td>
</tr>
<tr>
<td>of which stroke</td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td></td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>19%</td>
<td>50%</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>32,381</td>
<td>106,728</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>14,697</td>
<td>41,304</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>40,271</td>
<td>117,274</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 1.1 |
| Proportion of the population living in urban areas 2020 (%) | 36.3 |
| Proportion of population taking insufficient physical activity 2016 (%) | 2.99 |
| Plastics waste (latest year) (kg per capita) | 3.2 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 16.3 |
| Consumption of animal proteins 2021 (grams per capita per day) | 84.4 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 23.4 |

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
4. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>100,727</td>
<td>4,366</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>11,551</td>
<td>181</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>38,346</td>
<td>2,120</td>
</tr>
<tr>
<td>of which stroke</td>
<td>21,181</td>
<td>892</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,668</td>
<td>404</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23%</td>
<td>32%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67,518</td>
<td>77,822</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of children with high BMI connected to specific conditions</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which children with high blood pressure attributable to high BMI</td>
<td>4,814</td>
<td>6,170</td>
</tr>
<tr>
<td>of which children with hyperglycaemia attributable to high BMI</td>
<td>2,276</td>
<td>2,669</td>
</tr>
<tr>
<td>of which children with low HDL cholesterol attributable to high BMI</td>
<td>6,184</td>
<td>7,388</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>68.3</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.03</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>33.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>29.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>80.1</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>68.8</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>65.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>181,680</td>
<td>6,165</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>35,262</td>
<td>449</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>79,597</td>
<td>3,316</td>
</tr>
<tr>
<td>of which stroke</td>
<td>13,039</td>
<td>348</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>9,694</td>
<td>430</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>181,680</td>
<td>6,165</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>35,262</td>
<td>449</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>79,597</td>
<td>3,316</td>
</tr>
<tr>
<td>of which stroke</td>
<td>13,039</td>
<td>348</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>9,694</td>
<td>430</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>NCDs</th>
<th>2020 Prevalence of children with high BMI</th>
<th>2035 Prevalence of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>649,723</td>
<td>565,163</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>55,409</td>
<td>53,797</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>22,565</td>
<td>20,035</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>63,312</td>
<td>57,414</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>NCDs</th>
<th>2020 Proportion of adults taking insufficient physical activity (%)</th>
<th>2035 Proportion of adults taking insufficient physical activity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>36.4</td>
<td>36.4</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>82.1</td>
<td>82.1</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>29.8</td>
<td>29.8</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>80.1</td>
<td>80.1</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>70,806</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>22,683</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>8,974</td>
</tr>
<tr>
<td>of which stroke</td>
<td>16,421</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>3,605</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>21%</td>
<td>48%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>152,368</td>
<td>386,673</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>11,513</td>
<td>36,214</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>5,184</td>
<td>13,664</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>14,228</td>
<td>39,033</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO$_2$ equivalent 2015 (tonnes per capita per year) | n/a |
| Annual increase in GHG emissions 2000–2015 (%) | n/a |
| Proportion of the population living in urban areas 2020 (%) | 29.0 |
| Annual increase in urbanisation 1995–2020 (%) | 2.16 |
| Plastic waste (latest year) (kg per capita) | n/a |
| Proportion of adults taking insufficient physical activity 2016 (%) | 6.3 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 19.5 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 26.5 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m$^2$).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m$^2$).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td></td>
</tr>
<tr>
<td>of which stroke</td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td></td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800</td>
<td>1350</td>
<td>900</td>
<td>450</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>47,865</td>
<td>143,208</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>6,893</td>
<td>20,622</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,867</td>
<td>5,585</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>5,840</td>
<td>17,471</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | n/a |
| Annual increase in GHG emissions 2000–2015 (%) | n/a |
| Proportion of the population living in urban areas 2020 (%) | 52.1 |
| Annual increase in urbanisation 1995–2020 (%) | 0.50 |
| Plastic waste (latest year) (kg per capita) | n/a |
| Proportion of adults taking insufficient physical activity 2016 (%) | 25.1 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 13.5 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 9.0 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>225,064</td>
<td>6,199</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>47,496</td>
<td>544</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>76,092</td>
<td>2,623</td>
</tr>
<tr>
<td>of which stroke</td>
<td>37,336</td>
<td>991</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>9,905</td>
<td>367</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>39%</td>
<td>54%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>753,252</td>
<td>979,158</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>64,851</td>
<td>94,163</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>26,205</td>
<td>34,781</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>73,657</td>
<td>99,872</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>80.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>26.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>36.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>83.2</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>47.9</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>41.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>129,387</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>5,807</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>11,204</td>
</tr>
<tr>
<td>of which stroke</td>
<td>56,535</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>23,298</td>
</tr>
<tr>
<td></td>
<td>12,107</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24%</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>98,135</th>
<th>129,347</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>7,123</td>
<td>10,558</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,318</td>
<td>4,458</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>9,042</td>
<td>12,406</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 3.6 |
| Annual increase in GHG emissions 2000–2015 (%)                             | 1.5 |
| Proportion of the population living in urban areas 2020 (%)                | 68.0 |
| Annual increase in urbanisation 1995–2020 (%)                               | 0.04 |
| Plastic waste (latest year) (kg per capita)                                 | 47.9 |
| Proportion of adults taking insufficient physical activity 2016 (%)        | 26.5 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 80.2 |
| Consumption of animal proteins 2021 (grams per capita per day)             | 86.7 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year)           | 96.0 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>10,837</td>
<td>353</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,973</td>
<td>25</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,903</td>
<td>103</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,150</td>
<td>43</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,319</td>
<td>65</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>1,903</td>
<td>2,133</td>
<td>2,370</td>
<td>2,610</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>1,150</td>
<td>1,314</td>
<td>1,478</td>
<td>1,643</td>
</tr>
<tr>
<td>Stroke</td>
<td>1,017</td>
<td>1,131</td>
<td>1,250</td>
<td>1,367</td>
</tr>
<tr>
<td>Other NCDs</td>
<td>2,758</td>
<td>3,262</td>
<td>3,778</td>
<td>4,295</td>
</tr>
<tr>
<td>All NCDs</td>
<td>4,861</td>
<td>5,746</td>
<td>6,628</td>
<td>7,511</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,133</td>
<td>2,950</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,017</td>
<td>1,314</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,758</td>
<td>3,615</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>15.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-1.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>91.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>142.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>28.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>79.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>75.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>162.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>310,956</td>
<td>8,518</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>45,638</td>
<td>945</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>44,341</td>
<td>1,375</td>
</tr>
<tr>
<td>of which stroke</td>
<td>126,086</td>
<td>3,368</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,749</td>
<td>298</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035^{(1)(2)}

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>14%</td>
<td>30%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,427,536</td>
<td>4,033,324</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>74,665</td>
<td>249,500</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>46,154</td>
<td>133,205</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>119,419</td>
<td>353,522</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity^{(2)(3)}

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 0.1
- Annual increase in GHG emissions 2000–2015 (%): 1.7
- Proportion of the population living in urban areas 2020 (%): 38.5
- Annual increase in urbanisation 1995–2020 (%): 1.61
- Plastic waste (latest year) (kg per capita): n/a
- Proportion of adults taking insufficient physical activity 2016 (%): 17.2
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): n/a
- Consumption of animal proteins 2021 (grams per capita per day): 5.3
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 11.3

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. See methodology sections of the World Obesity Federation Atlas 2024.
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
### Malawi

Projected numbers of adults and children with high Body Mass Index (BMI)

- **Adults**
  - 2020: 1,500,000
  - 2025: 3,000,000
  - 2030: 4,500,000
  - 2035: 6,000,000
- **Children**
  - 2020: 1,500,000
  - 2025: 3,000,000
  - 2030: 4,500,000
  - 2035: 6,000,000

### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>156,129</td>
<td>4,547</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>37,238</td>
<td>807</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>24,330</td>
<td>811</td>
</tr>
<tr>
<td>of which stroke</td>
<td>42,677</td>
<td>1,229</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>11,498</td>
<td>413</td>
</tr>
</tbody>
</table>

### Deaths from NCDs due to high BMI in adults 2019

- **Neoplasms**
  - 2020: 3,750
  - 2035: 4,250
- **Stroke**
  - 2020: 1,250
  - 2035: 1,560
- **Coronary HD**
  - 2020: 2,500
  - 2035: 3,000
- **Diabetes**
  - 2020: 2,500
  - 2035: 3,000
- **All other NCDs**
  - 2020: 1,500
  - 2035: 1,800

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1,2)}\)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>14%</td>
<td>31%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,093,721</td>
<td>3,124,199</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>59,690</td>
<td>199,769</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>35,542</td>
<td>103,654</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>92,533</td>
<td>276,558</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity\(^{(2,3)}\)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>17.4</td>
<td>1.08</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>15.6</td>
<td>16.0</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>16.0</td>
<td>6.5</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>156,129</td>
<td>4,547</td>
</tr>
</tbody>
</table>

### REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
4. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
7. *Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.*
8. *Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).*
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,849,369</td>
<td>4,994,863</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>264,604</td>
<td>526,068</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>100,529</td>
<td>180,749</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>286,692</td>
<td>528,584</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th>Environmental correlates of obesity(^{(2)(3)})</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>7.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>77.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>64.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>38.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>86.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>52.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>44.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYS) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>4,797</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,186</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,190</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,034</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>256</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>24,650</td>
<td>54,583</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,147</td>
<td>5,668</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>859</td>
<td>1,969</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,421</td>
<td>5,743</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

World Obesity Atlas 2024 145
Mali

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>183,073</td>
<td>5,316</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>41,136</td>
<td>957</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>28,236</td>
<td>1,046</td>
</tr>
<tr>
<td>of which stroke</td>
<td>53,461</td>
<td>1,492</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,091</td>
<td>281</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>14%</td>
<td>32%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,214,095</td>
<td>4,190,841</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>75,058</td>
<td>302,276</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>40,094</td>
<td>141,537</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>106,397</td>
<td>385,324</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>43.9</td>
<td>40.4</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.20</td>
<td>2.4</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>2.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>8.7</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>8.7</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>10.0</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>10,213</td>
<td>369</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,682</td>
<td>44</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,655</td>
<td>144</td>
</tr>
<tr>
<td>of which stroke</td>
<td>991</td>
<td>39</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>979</td>
<td>48</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>39%</td>
<td>44%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>26,204</td>
<td>30,708</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,996</td>
<td>2,467</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>893</td>
<td>1,055</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,454</td>
<td>2,929</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-2.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>94.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.16</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>83.3</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>41.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>81.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>59.2</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>86.3</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>54,016</td>
<td>1,754</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>11,253</td>
<td>320</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>10,527</td>
<td>429</td>
</tr>
<tr>
<td>of which stroke</td>
<td>13,670</td>
<td>399</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,497</td>
<td>102</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>19%</td>
<td>39%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>318,147</td>
<td>885,395</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>22,164</td>
<td>72,235</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>10,688</td>
<td>30,511</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>28,924</td>
<td>84,909</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>55.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>25.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>41.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>87.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>31.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>46.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

\(^{(1)}\) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).

\(^{(2)}\) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).

\(^{(3)}\) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Mauritius

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>71,439</td>
<td>2,236</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>32,507</td>
<td>887</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>8,555</td>
<td>326</td>
</tr>
<tr>
<td>of which stroke</td>
<td>8,035</td>
<td>229</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,876</td>
<td>110</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>18%</td>
<td>32%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>44,636</td>
<td>61,636</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>3,145</td>
<td>5,074</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,502</td>
<td>2,127</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>4,073</td>
<td>5,930</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>750</td>
<td>1500</td>
<td>2250</td>
<td>3000</td>
</tr>
<tr>
<td>Children</td>
<td>125,000</td>
<td>250,000</td>
<td>375,000</td>
<td>500,000</td>
</tr>
</tbody>
</table>

References:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. See methodology sections of the World Obesity Federation Atlas 2024
4. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
7. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>4,331,796</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,830,570</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>648,480</td>
</tr>
<tr>
<td>of which stroke</td>
<td>338,944</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>168,702</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>105,000</td>
<td>70,000</td>
<td>35,000</td>
<td>140,000</td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42%</td>
<td>56%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,128,506</td>
<td>1,456,447</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>469,581</td>
<td>553,115</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,311,151</td>
<td>1,577,547</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 3.7 |
| Annual increase in GHG emissions 2000–2015 (%) | 0.2 |
| Proportion of the population living in urban areas 2020 (%) | 80.7 |
| Annual increase in urbanisation 1995–2020 (%) | 0.38 |
| Plastic waste (latest year) (kg per capita) | 46.0 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 28.9 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 83.2 |
| Consumption of animal proteins 2021 (grams per capita per day) | 56.0 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 42.3 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>8,215</td>
<td>218</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,773</td>
<td>68</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,008</td>
<td>58</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,707</td>
<td>44</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>303</td>
<td>9</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>27%</td>
<td>52%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>9,665</td>
<td>17,986</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>1,392</td>
<td>2,590</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>377</td>
<td>701</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,179</td>
<td>2,194</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>22.9</td>
<td>22.9</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.37</td>
<td>-0.37</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>64.9</td>
<td>64.9</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>36.7</td>
<td>36.7</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>48.1</td>
<td>48.1</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>52.5</td>
<td>52.5</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>177,690</td>
<td>6,769</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>18,766</td>
<td>170</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>72,106</td>
<td>3,495</td>
</tr>
<tr>
<td>of which stroke</td>
<td>42,228</td>
<td>1,495</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>10,549</td>
<td>406</td>
</tr>
</tbody>
</table>

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>21%</td>
<td>35%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>116,717</td>
<td>210,729</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>7,274</td>
<td>15,132</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,859</td>
<td>7,112</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>10,253</td>
<td>19,347</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>42.8</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.31</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>112.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>11.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>75.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>48.6</td>
<td></td>
</tr>
<tr>
<td>Consumer of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>37.7</td>
<td></td>
</tr>
</tbody>
</table>

### REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>123,350</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,587</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>5,760</td>
</tr>
<tr>
<td>of which stroke</td>
<td>34,674</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>53,468</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>16,034</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,152</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,499</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>183,271</td>
<td>334,633</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>11,128</td>
<td>23,827</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>6,038</td>
<td>11,279</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>15,976</td>
<td>30,638</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 5.8 |
| Annual increase in GHG emissions 2000–2015 (%) | 3.1 |
| Proportion of the population living in urban areas 2020 (%) | 68.7 |
| Annual increase in urbanisation 1995–2020 (%) | 0.76 |
| Plastic waste (latest year) (kg per capita) | 138.9 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 18.6 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 78.8 |
| Consumption of animal proteins 2021 (grams per capita per day) | 84.7 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 75.3 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Montenegro

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>33,531</td>
<td>1,218</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>5,696</td>
<td>79</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>9,133</td>
<td>418</td>
</tr>
<tr>
<td>of which stroke</td>
<td>10,904</td>
<td>459</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,361</td>
<td>101</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>33%</td>
<td>56%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>38,390</td>
<td>58,616</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,807</td>
<td>5,230</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,299</td>
<td>2,053</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,546</td>
<td>5,809</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>67.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>97.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>78.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>112.9</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,295,207</td>
<td>41,917</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>218,097</td>
<td>3,561</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>493,710</td>
<td>18,900</td>
</tr>
<tr>
<td>of which stroke</td>
<td>238,209</td>
<td>7,415</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>31,099</td>
<td>1,271</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other NCDs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>34%</td>
<td>3,312,635</td>
<td>263,945</td>
<td>511,363</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>34%</td>
<td>3,312,635</td>
<td>263,945</td>
<td>511,363</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>34%</td>
<td>3,312,635</td>
<td>263,945</td>
<td>511,363</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>63.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>16.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>26.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>87.3</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>30.2</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>32.5</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Mozambique

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>280,353</td>
<td>7,732</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>65,513</td>
<td>1,422</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>35,619</td>
<td>1,133</td>
</tr>
<tr>
<td>of which stroke</td>
<td>104,795</td>
<td>2,922</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,258</td>
<td>300</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>17%</td>
<td>35%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,075,554</td>
<td>6,058,416</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>112,831</td>
<td>379,822</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>67,416</td>
<td>200,454</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>175,415</td>
<td>533,135</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.2</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>6.1</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>37.1</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.2</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>5.6</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>87.1</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>9.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>11.8</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,112,785</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>301,144</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>132,067</td>
</tr>
<tr>
<td>of which stroke</td>
<td>414,397</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>48,063</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>155,543</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>71,920</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>196,305</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>16%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,124,573</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>155,543</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>71,920</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>196,305</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>31.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>10.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>86.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>23.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>27.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost</th>
<th>Deaths from NCDs due to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(DALYs) to NCDs due to high BMI in 2019</td>
<td>due to high BMI in 2019</td>
</tr>
<tr>
<td>All non-communicable diseases</td>
<td>46,150</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>13,877</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>7,396</td>
</tr>
<tr>
<td>of which stroke</td>
<td>10,517</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,443</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Non-communicable diseases (NCDs) in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>20%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>165,341</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>12,307</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>5,612</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>15,362</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 1.7 |
| Annual increase in GHG emissions 2000–2015 (%) | 3.0 |
| Proportion of the population living in urban areas 2020 (%) | 52.0 |
| Annual increase in urbanisation 1995–2020 (%) | 2.25 |
| Plastic waste (latest year) (kg per capita) | n/a |
| Proportion of adults taking insufficient physical activity 2016 (%) | 33.4 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 87.4 |
| Consumption of animal proteins 2021 (grams per capita per day) | 28.7 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 65.4 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI ≥ 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs in adults attributed to high BMI, 2019</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>328,323</td>
<td>9,144</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>67,848</td>
<td>826</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>87,188</td>
<td>2,893</td>
</tr>
<tr>
<td>of which stroke</td>
<td>70,208</td>
<td>2,205</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>11,735</td>
<td>442</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus</td>
<td>328,323</td>
<td>9,144</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>67,848</td>
<td>826</td>
</tr>
<tr>
<td>Stroke</td>
<td>87,188</td>
<td>2,893</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>70,208</td>
<td>2,205</td>
</tr>
<tr>
<td>Diabetes</td>
<td>11,735</td>
<td>442</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Early signs of NCDs in children aged 5–19 years, 2020 and 2035</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>10%</td>
<td>28%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>935,450</td>
<td>2,444,201</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>53,330</td>
<td>153,422</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>30,564</td>
<td>80,884</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>80,096</td>
<td>215,165</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlates of obesity</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.2</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.3</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>20.6</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.58</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>9.2</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>13.4</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>83.5</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>17.1</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>12.2</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>312,572</td>
<td>11,692</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>63,604</td>
<td>1,148</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>53,463</td>
<td>2,842</td>
</tr>
<tr>
<td>of which stroke</td>
<td>38,461</td>
<td>1,489</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>57,613</td>
<td>2,885</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035^(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>866,898</td>
<td>1,125,154</td>
</tr>
</tbody>
</table>

| of which, children with high blood pressure attributable to high BMI | 58,404 | 87,470 |
| of which, children with hyperglycaemia attributable to high BMI | 28,978 | 38,459 |
| of which, children with low HDL cholesterol attributable to high BMI | 77,982 | 106,093 |

Environmental correlates of obesity^(2)(3)

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 9.3 |
| Annual increase in GHG emissions 2000–2015 (%) | -0.6 |
| Proportion of the population living in urban areas 2020 (%) | 92.2 |
| Annual increase in urbanisation 1995–2020 (%) | 0.95 |
| Plastic waste (latest year) (kg per capita) | 71.1 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 27.2 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 80.2 |
| Consumption of animal proteins 2021 (grams per capita per day) | 74.5 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 45.4 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>98,454</td>
<td>3,626</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>16,967</td>
<td>304</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>23,588</td>
<td>1,267</td>
</tr>
<tr>
<td>of which stroke</td>
<td>10,788</td>
<td>404</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>14,142</td>
<td>666</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>43%</td>
<td>53%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>422,495</td>
<td>513,303</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>35,114</td>
<td>47,623</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>14,606</td>
<td>18,107</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>40,787</td>
<td>51,628</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td></td>
<td>6.8</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>86.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>58.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>42.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>88.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>54.6</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>61.5</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) Annual growth rate in the projected numbers of adults with high BMI 2020–2035.
(3) Annual growth rate in the projected numbers of children with high BMI 2020–2035.
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(5) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(6) See methodology sections of the World Obesity Federation Atlas 2024.
(7) World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>142,611</td>
<td>4,341</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>47,531</td>
<td>972</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>23,594</td>
<td>1,017</td>
</tr>
<tr>
<td>of which stroke</td>
<td>13,462</td>
<td>434</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>4,839</td>
<td>197</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus</td>
<td>47,531</td>
<td>972</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary heart disease</td>
<td>23,594</td>
<td>1,017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>13,462</td>
<td>434</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neoplasms</td>
<td>4,839</td>
<td>197</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other NCDs</td>
<td>688,249</td>
<td>1,053,148</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34%</td>
<td>51%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>53,455</td>
<td>93,417</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>23,521</td>
<td>36,837</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>64,875</td>
<td>104,131</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>59.0</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>27.8</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>39.2</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024.
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>127,586</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>25,508</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>22,205</td>
</tr>
<tr>
<td>of which stroke</td>
<td>42,781</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,950</td>
</tr>
<tr>
<td>Deaths from NCDs due to high BMI in 2019</td>
<td>3,659</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>615</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>784</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,194</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>109</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,007,263</td>
<td>4,051,558</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>51,473</td>
<td>233,439</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>32,478</td>
<td>132,557</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>83,756</td>
<td>347,933</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 0.1 |
| Annual increase in GHG emissions 2000–2015 (%) | 3.9 |
| Proportion of the population living in urban areas 2020 (%) | 16.6 |
| Annual increase in urbanisation 1995–2020 (%) | 0.20 |
| Plastic waste (latest year) (kg per capita) | 4.2 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 22.4 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 9.3 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 5.9 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Nigeria

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,660,974</td>
<td>47,555</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>364,012</td>
<td>9,055</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>314,765</td>
<td>11,315</td>
</tr>
<tr>
<td>of which stroke</td>
<td>456,852</td>
<td>12,870</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>47,822</td>
<td>1,920</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>11%</td>
<td>26%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>8,817,218</td>
<td>27,872,943</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>526,532</td>
<td>1,957,888</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>289,824</td>
<td>937,531</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>764,930</td>
<td>2,540,794</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>52.0</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.94</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>27.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>9.8</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI) in North Macedonia

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>127,307</td>
<td>4,676</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>26,871</td>
<td>569</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>30,575</td>
<td>1,361</td>
</tr>
<tr>
<td>of which stroke</td>
<td>38,618</td>
<td>1,578</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,032</td>
<td>333</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>30%</td>
<td>47%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>109,482</td>
<td>139,641</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>8,504</td>
<td>12,677</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,742</td>
<td>4,906</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>10,320</td>
<td>13,928</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(4) High BMI data: NCD Risk Factor Collaboration projections by RTI International.
(5) DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
(6) Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
(7) Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>80,661</td>
<td>2,781</td>
</tr>
<tr>
<td>Of which diabetes mellitus</td>
<td>18,860</td>
<td>207</td>
</tr>
<tr>
<td>Of which coronary (ischaemic) heart disease</td>
<td>15,441</td>
<td>869</td>
</tr>
<tr>
<td>Of which stroke</td>
<td>9,555</td>
<td>326</td>
</tr>
<tr>
<td>Of which cancers (neoplasms)</td>
<td>10,765</td>
<td>541</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>32%</td>
<td>42%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>311,298</td>
<td>366,211</td>
</tr>
<tr>
<td>Of which, children with high blood pressure attributable to high BMI</td>
<td>22,531</td>
<td>29,392</td>
</tr>
<tr>
<td>Of which, children with hyperglycaemia attributable to high BMI</td>
<td>10,519</td>
<td>12,585</td>
</tr>
<tr>
<td>Of which, children with low HDL cholesterol attributable to high BMI</td>
<td>28,655</td>
<td>34,917</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. See methodology sections of the World Obesity Federation Atlas 2024.
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td></td>
</tr>
<tr>
<td>of which stroke</td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>36,498</td>
<td>82,532</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>14,421</td>
<td>29,309</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>40,745</td>
<td>84,988</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 15.2 |
| Annual increase in GHG emissions 2000–2015 (%) | 3.8 |
| Proportion of the population living in urban areas 2020 (%) | 86.3 |
| Annual increase in urbanisation 1995–2020 (%) | 0.74 |
| Plastic waste (latest year) (kg per capita) | 92.0 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 33.0 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 83.8 |
| Consumption of animal proteins 2021 (grams per capita per day) | 53.5 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 24.0 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>3,614,807</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>101,123</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>880,741</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,099,084</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>134,934</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>30,000</td>
<td>60,000</td>
<td>90,000</td>
<td>120,000</td>
<td>180,000</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>13%</td>
<td>30%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>10,160,258</td>
<td>28,520,051</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>728,012</td>
<td>2,425,002</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>342,791</td>
<td>989,963</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>932,161</td>
<td>2,776,112</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024.
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>95,098</td>
<td>2,816</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>28,368</td>
<td>646</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>27,504</td>
<td>965</td>
</tr>
<tr>
<td>of which stroke</td>
<td>14,718</td>
<td>451</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>4,294</td>
<td>157</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>38%</td>
<td>55%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>684,623</td>
<td>1,231,975</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>57,135</td>
<td>117,976</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>23,686</td>
<td>43,725</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>66,190</td>
<td>125,449</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>81.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>140.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>40.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>79.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

Palestine

Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): n/a

World Obesity Atlas 2024

169
Panama

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>81,831</td>
<td>2,264</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>31,877</td>
<td>556</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>11,096</td>
<td>471</td>
</tr>
<tr>
<td>of which stroke</td>
<td>10,610</td>
<td>340</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>4,404</td>
<td>182</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>35%</td>
<td>53%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>394,305</td>
<td>615,410</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>30,248</td>
<td>54,394</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>13,448</td>
<td>21,512</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>37,010</td>
<td>60,768</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.5</td>
<td>2.7</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.9</td>
<td>3.1</td>
<td>3.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>68.4</td>
<td>70.0</td>
<td>71.6</td>
<td>73.2</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.65</td>
<td>0.75</td>
<td>0.85</td>
<td>0.95</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>44.5</td>
<td>47.0</td>
<td>49.5</td>
<td>52.0</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>57.2</td>
<td>59.0</td>
<td>60.8</td>
<td>62.6</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>49.6</td>
<td>52.0</td>
<td>54.5</td>
<td>57.0</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Papua New Guinea

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>212,197</td>
<td>5,004</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>81,570</td>
<td>1,667</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>41,001</td>
<td>1,156</td>
</tr>
<tr>
<td>of which stroke</td>
<td>49,771</td>
<td>1,191</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>6,609</td>
<td>204</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
<th>of which, children with high blood pressure attributable to high BMI</th>
<th>of which, children with hyperglycaemia attributable to high BMI</th>
<th>of which, children with low HDL cholesterol attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>12%</td>
<td>398,213</td>
<td>57,343</td>
<td>48,582</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>27%</td>
<td>995,954</td>
<td>143,417</td>
<td>121,506</td>
<td></td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>13.3</td>
<td>13.3</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.23</td>
<td>-0.23</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>12.9</td>
<td>12.9</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>14.8</td>
<td>14.8</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>33.8</td>
<td>33.8</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>12.2</td>
<td>12.2</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(5) High BMI data: NCD Risk Factor Collaboration projections by RTI International.
(6) DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
(7) Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
(8) Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).

### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease Type</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>153,537</td>
<td>4,820</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>47,730</td>
<td>1,219</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>28,704</td>
<td>1,089</td>
</tr>
<tr>
<td>of which stroke</td>
<td>26,956</td>
<td>833</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>7,673</td>
<td>308</td>
</tr>
</tbody>
</table>

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>35%</td>
<td>641,611</td>
</tr>
<tr>
<td></td>
<td>55%</td>
<td>1,122,982</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>50,962</td>
</tr>
<tr>
<td></td>
<td></td>
<td>104,449</td>
</tr>
<tr>
<td></td>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>22,010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39,632</td>
</tr>
<tr>
<td></td>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>60,951</td>
</tr>
<tr>
<td></td>
<td></td>
<td>113,059</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 1.0
- Annual increase in GHG emissions 2000–2015 (%): 2.8
- Proportion of the population living in urban areas 2020 (%): 62.2
- Annual increase in urbanisation 1995–2020 (%): 0.71
- Plastic waste (latest year) (kg per capita): n/a
- Proportion of adults taking insufficient physical activity 2016 (%): 37.4
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): 83.5
- Consumption of animal proteins 2021 (grams per capita per day): 30.6
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 18.0

**REFERENCES:**

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Peru

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>471,505</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>121,161</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>77,378</td>
</tr>
<tr>
<td>of which stroke</td>
<td>78,462</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>41,450</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>14,354</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,345</td>
</tr>
<tr>
<td>of which stroke</td>
<td>3,238</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,141</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,709</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>11,288</td>
<td>13,011</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,954</td>
<td>3,438</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,795</td>
<td>2,129</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,712</td>
<td>2,024</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,617</td>
<td>1,920</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>31%</td>
<td>42%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,721,524</td>
<td>3,710,602</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>184,490</td>
<td>283,139</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>91,055</td>
<td>126,445</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>245,291</td>
<td>347,651</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
Annual increase in GHG emissions 2000–2015 (%)
Proportion of the population living in urban areas 2020 (%)
Annual increase in urbanisation 1995–2020 (%)
Plastic waste (latest year) (kg per capita)
Proportion of adults taking insufficient physical activity 2016 (%)
Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
Consumption of animal proteins 2021 (grams per capita per day)
Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Philippines

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>2,326,306</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>473,362</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>508,023</td>
</tr>
<tr>
<td>of which stroke</td>
<td>593,318</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>108,568</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>17%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>5,760,657</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>430,541</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>195,648</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>535,948</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Carbon dioxide (CO2) emissions CO2 equivalent 2015 (tonnes per capita per year) | 1.0 |
| Annual increase in GHG emissions 2000–2015 (%) | 1.0 |
| Proportion of the population living in urban areas 2020 (%) | 47.4 |
| Annual increase in urbanisation 1995–2020 (%) | 0.07 |
| Plastic waste (latest year) (kg per capita) | 14.9 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 39.7 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 93.4 |
| Consumption of animal proteins 2021 (grams per capita per day) | 28.4 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 23.3 |

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,560,738</td>
<td>57,514</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>314,231</td>
<td>4,191</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>436,036</td>
<td>23,019</td>
</tr>
<tr>
<td>of which stroke</td>
<td>266,655</td>
<td>9,643</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>181,932</td>
<td>8,411</td>
</tr>
</tbody>
</table>

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>29%</td>
<td>45%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,700,307</td>
<td>2,480,907</td>
</tr>
<tr>
<td>of which, children with high blood pressure</td>
<td>130,200</td>
<td>223,107</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia</td>
<td>57,974</td>
<td>86,999</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol</td>
<td>159,495</td>
<td>246,574</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.10</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>40.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>32.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>78.8</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>73.2</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>44.7</td>
<td></td>
</tr>
</tbody>
</table>

### REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>263,579</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>73,456</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>36,707</td>
</tr>
<tr>
<td>of which stroke</td>
<td>40,668</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>30,950</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Stroke</td>
<td>6,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>9,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Diabetes</td>
<td>12,000</td>
<td>15,000</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>15,000</td>
<td>18,000</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>41%</td>
<td>57%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>609,369</td>
<td>699,221</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>45,465</td>
<td>58,144</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>20,690</td>
<td>24,176</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>56,660</td>
<td>67,514</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environment correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>66.3</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>55.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>43.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.3</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>78.6</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>23.3</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2019 Person-years lost (DALYs) to NCDs due to high BMI</th>
<th>2019 Deaths from NCDs due to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>175,889</td>
<td>5,829</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>74,294</td>
<td>1,729</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>26,243</td>
<td>1,232</td>
</tr>
<tr>
<td>of which stroke</td>
<td>11,295</td>
<td>398</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>11,806</td>
<td>539</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>25%</td>
<td>39%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>131,049</td>
<td>151,406</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>18,871</td>
<td>21,802</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>5,111</td>
<td>5,905</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>15,988</td>
<td>18,472</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>124.9</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>57,270</td>
<td>963</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>24,591</td>
<td>253</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>12,899</td>
<td>398</td>
</tr>
<tr>
<td>of which stroke</td>
<td>6,206</td>
<td>107</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,699</td>
<td>90</td>
</tr>
</tbody>
</table>

### Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td>99.2</td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td>0.17</td>
</tr>
<tr>
<td>Diabetes</td>
<td>36.8</td>
<td></td>
</tr>
<tr>
<td>All other NCDs</td>
<td>88.2</td>
<td></td>
</tr>
</tbody>
</table>

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>42%</td>
<td>52%</td>
</tr>
<tr>
<td>Children</td>
<td>151,030</td>
<td>206,968</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity(2)(3)

- **Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)**: 33.3
- **Annual increase in GHG emissions 2000–2015 (%)**: 0.1
- **Proportion of the population living in urban areas 2020 (%)**: 99.2
- **Annual increase in urbanisation 1995–2020 (%)**: 0.17
- **Plastic waste (latest year) (kg per capita)**: 66.4
- **Proportion of adults taking insufficient physical activity 2016 (%)**: 36.8
- **Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)**: 88.2
- **Consumption of animal proteins 2021 (grams per capita per day)**: 57.4
- **Consumption of sugar and sweeteners 2021 (kg per capita per year)**: 38.3

### REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,029,543</td>
<td>42,107</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>113,583</td>
<td>1,360</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>316,648</td>
<td>16,324</td>
</tr>
<tr>
<td>of which stroke</td>
<td>263,596</td>
<td>10,614</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>74,613</td>
<td>3,193</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of children with high BMI</td>
<td>29%</td>
<td>48%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>905,834</td>
<td>1,438,472</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>67,166</td>
<td>128,224</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>30,726</td>
<td>50,361</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>84,052</td>
<td>142,493</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>3.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>54.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>34.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>35.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>79.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>59.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>31.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
**Russian Federation**

Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th></th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>70,000,000</td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>52,500,000</td>
<td>17,500,000</td>
</tr>
<tr>
<td>2030</td>
<td>35,000,000</td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>17,500,000</td>
<td>17,500,000</td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>7,343,614</td>
<td>283,792</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>606,735</td>
<td>10,573</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>3,118,940</td>
<td>146,435</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,996,042</td>
<td>73,969</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>527,034</td>
<td>21,876</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other NCDs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>23%</td>
<td>31%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>5,582,761</td>
<td>6,660,647</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>400,469</td>
<td>536,300</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>188,386</td>
<td>229,014</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>512,382</td>
<td>635,778</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>10.6</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>0.4</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>74.8</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.08</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>59.5</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>17.1</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.5</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>63.3</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>60.7</td>
</tr>
</tbody>
</table>

**REFERENCES:**

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>103,659</td>
<td>3,077</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>23,402</td>
<td>559</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>12,877</td>
<td>468</td>
</tr>
<tr>
<td>of which stroke</td>
<td>31,064</td>
<td>934</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>5,896</td>
<td>217</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>34%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>721,284</td>
<td>2,039,571</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>36,510</td>
<td>120,259</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>23,232</td>
<td>66,930</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>59,830</td>
<td>176,299</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>7,111</td>
<td>199</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,077</td>
<td>61</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>694</td>
<td>28</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,145</td>
<td>38</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>361</td>
<td>14</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>12%</td>
<td>26%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,269</td>
<td>7,807</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>615</td>
<td>1,124</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>167</td>
<td>304</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>521</td>
<td>952</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>18.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-1.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>96.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>39.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>84.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>65.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>47.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Saint Vincent and the Grenadines

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>5,251</th>
<th>162</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which diabetes mellitus</td>
<td>2,169</td>
<td>52</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>782</td>
<td>32</td>
</tr>
<tr>
<td>of which stroke</td>
<td>763</td>
<td>25</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>245</td>
<td>10</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>135</td>
<td>90</td>
<td>45</td>
<td>0</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th></th>
<th>2035</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>17%</td>
<td></td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,008</td>
<td></td>
<td>6,917</td>
<td></td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>577</td>
<td></td>
<td>996</td>
<td></td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>156</td>
<td></td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>489</td>
<td></td>
<td>844</td>
<td></td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th></th>
<th></th>
<th>2035</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
<td></td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>53.0</td>
<td></td>
<td></td>
<td>53.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>85.8</td>
<td></td>
<td></td>
<td>65.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>69.4</td>
<td></td>
<td></td>
<td>65.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>3.7%</td>
<td>Annual growth rate in the projected numbers of adults with high BMI 2020–2035</td>
<td>3.1%</td>
<td>Annual growth rate in the projected numbers of children with high BMI 2020–2035</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

Environmental correlates of obesity(2)(3)

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Sao Tome and Principe

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases 3,440 98</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus 466 7</td>
<td></td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease 714 27</td>
<td></td>
</tr>
<tr>
<td>of which stroke 1,126 30</td>
<td></td>
</tr>
<tr>
<td>of which cancers (neoplasms) 157 6</td>
<td></td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | n/a |
| Proportion of adults taking insufficient physical activity 2016 (%) | 15.5 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | n/a |
| Consumption of animal proteins 2021 (grams per capita per day) | 22.3 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 41.8 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Saudi Arabia

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,182,054</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>206,878</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>450,564</td>
</tr>
<tr>
<td>of which stroke</td>
<td>255,056</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>36,554</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>3,832,830</td>
<td>5,719,803</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>349,430</td>
<td>587,196</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>134,753</td>
<td>205,876</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>382,924</td>
<td>598,935</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>179,902</td>
<td>5,263</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>48,076</td>
<td>1,018</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>31,483</td>
<td>1,188</td>
</tr>
<tr>
<td>of which stroke</td>
<td>47,097</td>
<td>1,334</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>6,042</td>
<td>239</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence of children with high BMI</td>
<td>12%</td>
<td>17%</td>
<td>22%</td>
<td>27%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>722,292</td>
<td>849,020</td>
<td>975,752</td>
<td>1,092,480</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>40,337</td>
<td>50,413</td>
<td>60,503</td>
<td>70,593</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>23,539</td>
<td>27,658</td>
<td>31,804</td>
<td>35,951</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>61,493</td>
<td>72,642</td>
<td>83,791</td>
<td>94,941</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020 (tonnes per capita per year)</th>
<th>2025 (%)</th>
<th>2030 (%)</th>
<th>2035 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015</td>
<td>0.5</td>
<td>2.5</td>
<td>5.0</td>
<td>7.5</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas</td>
<td>48.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>14.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>23.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>88.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>17.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>17.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024.
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>488,569</td>
<td>19,161</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>98,436</td>
<td>1,922</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>132,371</td>
<td>6,748</td>
</tr>
<tr>
<td>of which stroke</td>
<td>118,794</td>
<td>4,968</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>42,736</td>
<td>1,897</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>33%</td>
<td>53%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>357,943</td>
<td>508,897</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>28,111</td>
<td>47,332</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>12,256</td>
<td>17,960</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>33,870</td>
<td>51,234</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>36%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>43.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>39.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>58.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>16.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,414</td>
<td>88</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>866</td>
<td>10</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>616</td>
<td>20</td>
</tr>
<tr>
<td>of which stroke</td>
<td>633</td>
<td>16</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>288</td>
<td>10</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>3,186</td>
<td>6,816</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>459</td>
<td>981</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>124</td>
<td>266</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>389</td>
<td>832</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | n/a |
| Proportion of adults taking insufficient physical activity 2016 (%) | 57.5 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 0.59 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 53.8 |
| Consumption of animal proteins 2021 (grams per capita per day) | 58.8 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 45.5 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI) in Sierra Leone

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>72,035</td>
<td>2,061</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>13,369</td>
<td>336</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>14,693</td>
<td>508</td>
</tr>
<tr>
<td>of which stroke</td>
<td>24,324</td>
<td>650</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>2,260</td>
<td>82</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
<th>Proportion of adults taking insufficient physical activity 2016 (%)</th>
<th>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</th>
<th>Consumption of animal proteins 2021 (grams per capita per day)</th>
<th>Consumption of sugar and sweeteners 2021 (kg per capita per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>14%</td>
<td>410,224</td>
<td>n/a</td>
<td>n/a</td>
<td>14.3</td>
<td>5.8</td>
</tr>
<tr>
<td>2035</td>
<td>27%</td>
<td>1,005,604</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>42.9</td>
<td>0.89</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>14.3</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>14.1</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>5.8</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>76,382</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>20,156</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>14,127</td>
</tr>
<tr>
<td>of which stroke</td>
<td>9,934</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>7,091</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,777</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>60</td>
</tr>
<tr>
<td>of which stroke</td>
<td>227</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>295</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>170,169</td>
<td>170,616</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>11,682</td>
<td>12,093</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>5,704</td>
<td>5,747</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>15,399</td>
<td>15,598</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-1.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>34.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>36.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>76.3</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>229,896</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>34,245</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>81,333</td>
</tr>
<tr>
<td>of which stroke</td>
<td>37,961</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>25,862</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>230,226</td>
<td>382,803</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>17,585</td>
<td>35,416</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>7,847</td>
<td>13,496</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>21,578</td>
<td>38,460</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

| Greenhouse gas (GHG) emissions CO\(_2\) equivalent 2015 (tonnes per capita per year) | 5.4 |
| Annual increase in GHG emissions 2000–2015 (%) | -1.5 |
| Proportion of the population living in urban areas 2020 (%) | 53.8 |
| Annual increase in urbanisation 1995–2020 (%) | -0.20 |
| Plastic waste (latest year) (kg per capita) | 46.3 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 34.9 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 71.5 |
| Consumption of animal proteins 2021 (grams per capita per day) | 45.2 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 64.1 |

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas and UN population projections).
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>65,550</td>
<td>2,605</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>13,561</td>
<td>175</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>12,620</td>
<td>681</td>
</tr>
<tr>
<td>of which stroke</td>
<td>8,662</td>
<td>342</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>9,245</td>
<td>463</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabeties</td>
<td>7,520</td>
<td>12,754</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>3,409</td>
<td>5,057</td>
</tr>
<tr>
<td>Stroke</td>
<td>9,343</td>
<td>14,277</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>1,200,000</td>
<td>600,000</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>900,000</td>
<td>300,000</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>32%</td>
<td>51%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>100,324</td>
<td>144,759</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>7,520</td>
<td>12,754</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,409</td>
<td>5,057</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>9,343</td>
<td>14,277</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>32.2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>80.0</td>
<td>55.8</td>
<td>48.3</td>
<td>30.8</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>65.8</td>
<td>55.8</td>
<td>48.3</td>
<td>30.8</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>9245</td>
<td>8662</td>
<td>9245</td>
<td>8662</td>
</tr>
</tbody>
</table>
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>39,467</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>10,912</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>12,544</td>
</tr>
<tr>
<td>of which stroke</td>
<td>10,749</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,228</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>770</td>
<td>790</td>
</tr>
<tr>
<td>Stroke</td>
<td>373</td>
<td>387</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>239</td>
<td>253</td>
</tr>
<tr>
<td>Diabetes</td>
<td>170</td>
<td>184</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>250</td>
<td>260</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035^(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>14,214</td>
<td>53,347</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,047</td>
<td>7,682</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>554</td>
<td>2,081</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>1,734</td>
<td>6,508</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity^(2)(3)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>24.7</td>
<td>24.9</td>
<td>25.2</td>
<td>25.5</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.10</td>
<td>2.12</td>
<td>2.15</td>
<td>2.17</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>71.4</td>
<td>72.0</td>
<td>72.6</td>
<td>73.2</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>18.2</td>
<td>18.3</td>
<td>18.4</td>
<td>18.5</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>83.7</td>
<td>83.8</td>
<td>83.9</td>
<td>84.0</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>20.9</td>
<td>21.0</td>
<td>21.1</td>
<td>21.2</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>19.3</td>
<td>19.4</td>
<td>19.5</td>
<td>19.6</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>75,766</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,011</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>15,722</td>
</tr>
<tr>
<td>of which stroke</td>
<td>11,734</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>25,182</td>
</tr>
<tr>
<td></td>
<td>83</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Yet</th>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>750</td>
<td>2,011</td>
<td>1500</td>
<td>2,250</td>
<td>3000</td>
<td>2,200</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>274,590</td>
<td>1,334,771</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>39,541</td>
<td>192,207</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>10,709</td>
<td>52,056</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>33,500</td>
<td>162,842</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>46.1</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.55</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,681,895</td>
<td>55,358</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>589,315</td>
<td>16,879</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>231,532</td>
<td>8,987</td>
</tr>
<tr>
<td>of which stroke</td>
<td>286,014</td>
<td>9,030</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>105,257</td>
<td>4,194</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>31%</td>
<td>71%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>4,877,371</td>
<td>12,008,292</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>464,734</td>
<td>1,463,899</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>172,937</td>
<td>449,029</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>495,676</td>
<td>1,354,070</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>644,522</td>
<td>19,333</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>189,776</td>
<td>3,316</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>60,160</td>
<td>2,943</td>
</tr>
<tr>
<td>of which stroke</td>
<td>118,934</td>
<td>3,557</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>92,304</td>
<td>4,003</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Cause</th>
<th>2020 Person-years</th>
<th>2025 Person-years</th>
<th>2030 Person-years</th>
<th>2035 Person-years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus</td>
<td>175,620</td>
<td>186,552</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary (ischaemic) heart disease</td>
<td>81,466</td>
<td>79,228</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>60,160</td>
<td>56,617</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neoplasms</td>
<td>92,304</td>
<td>89,220</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020 Prevalence</th>
<th>2025 Prevalence</th>
<th>2030 Prevalence</th>
<th>2035 Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>34%</td>
<td>40%</td>
<td>46%</td>
<td>49%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>2,407,996</td>
<td>2,365,675</td>
<td>2,310,675</td>
<td>2,301,675</td>
</tr>
<tr>
<td>of which, children with high blood pressure</td>
<td>175,620</td>
<td>186,552</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which, children with hyperglycaemia</td>
<td>81,466</td>
<td>79,228</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol</td>
<td>222,211</td>
<td>220,214</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent</td>
<td>11.4</td>
<td>11.2</td>
<td>11.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>1.6</td>
<td>1.5</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>81.4</td>
<td>80.9</td>
<td>80.4</td>
<td>80.0</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.16</td>
<td>0.14</td>
<td>0.12</td>
<td>0.10</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>96.3</td>
<td>95.9</td>
<td>95.5</td>
<td>95.1</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>35.4</td>
<td>34.7</td>
<td>34.0</td>
<td>33.3</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>94.2</td>
<td>93.7</td>
<td>93.2</td>
<td>92.7</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>61.3</td>
<td>61.2</td>
<td>61.1</td>
<td>61.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>49.1</td>
<td>48.9</td>
<td>48.7</td>
<td>48.5</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Condition</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,048,439</td>
<td>42,038</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>273,573</td>
<td>3,811</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>175,692</td>
<td>9,815</td>
</tr>
<tr>
<td>of which stroke</td>
<td>110,496</td>
<td>4,508</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>144,686</td>
<td>7,420</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Correlation Type</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>5.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-1.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>80.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>42.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>26.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>76.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>76.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>31.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Sri Lanka

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>533,585</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>220,969</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>85,975</td>
</tr>
<tr>
<td>of which stroke</td>
<td>68,821</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>24,778</td>
</tr>
<tr>
<td></td>
<td>15,935</td>
</tr>
<tr>
<td></td>
<td>4,723</td>
</tr>
<tr>
<td></td>
<td>3,435</td>
</tr>
<tr>
<td></td>
<td>2,020</td>
</tr>
<tr>
<td></td>
<td>990</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>911,187</td>
<td>1,968,126</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>72,025</td>
<td>188,398</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>31,232</td>
<td>69,847</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>86,414</td>
<td>200,379</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO$_2$ equivalent 2015 (tonnes per capita per year) | 0.9  |
| Proportion of the population living in urban areas 2020 (%) | 18.7 |
| Annual increase in urbanisation 1995–2020 (%) | 0.04 |
| Plastic waste (latest year) (kg per capita) | 8.7  |
| Proportion of adults taking insufficient physical activity 2016 (%) | 29.0 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 85.2 |
| Consumption of animal proteins 2021 (grams per capita per day) | 20.5 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 26.9 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m$^2$).

(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m$^2$).

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

- **Adults**
- **Children**

### Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>836,877</td>
<td>24,435</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>112,356</td>
<td>1,376</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>321,374</td>
<td>10,928</td>
</tr>
<tr>
<td>of which stroke</td>
<td>187,056</td>
<td>5,115</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>21,968</td>
<td>806</td>
</tr>
</tbody>
</table>

### Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

### Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>4%</td>
<td>13%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>665,309</td>
<td>2,941,679</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>95,805</td>
<td>423,602</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>25,947</td>
<td>114,725</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>81,168</td>
<td>358,885</td>
</tr>
</tbody>
</table>

### Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 0.4
- Annual increase in GHG emissions 2000–2015 (%): 6.6
- Proportion of the population living in urban areas 2020 (%): 35.3
- Annual increase in urbanisation 1995–2020 (%): 0.37
- Plastic waste (latest year) (kg per capita): 9.3
- Proportion of adults taking insufficient physical activity 2016 (%): n/a
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): 90.3
- Consumption of animal proteins 2021 (grams per capita per day): 20.2
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 34.9

### REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. See methodology sections of the World Obesity Federation Atlas 2024
4. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
7. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>23,447</td>
<td>657</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>7,805</td>
<td>138</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>4,054</td>
<td>146</td>
</tr>
<tr>
<td>of which stroke</td>
<td>4,990</td>
<td>160</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>855</td>
<td>33</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>18%</td>
<td>29%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>28,538</td>
<td>48,305</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>4,110</td>
<td>6,956</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,113</td>
<td>1,884</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,482</td>
<td>5,893</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>66.1</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>44.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>81.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>38.3</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>101.3</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

Environmental correlates of obesity

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Disease Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>145,350</td>
<td>6,129</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>32,468</td>
<td>470</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>27,288</td>
<td>1,771</td>
</tr>
<tr>
<td>of which stroke</td>
<td>12,150</td>
<td>477</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>19,039</td>
<td>989</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Disease</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>2,300</td>
<td>125</td>
</tr>
<tr>
<td>Stroke</td>
<td>4,750</td>
<td>255</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>5,250</td>
<td>315</td>
</tr>
<tr>
<td>Diabetes</td>
<td>3,500</td>
<td>205</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>10,000</td>
<td>600</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>28%</td>
<td>358,782</td>
</tr>
<tr>
<td>2035</td>
<td>38%</td>
<td>508,216</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlate</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-1.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>73.9</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>106.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>23.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>85.7</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>66.9</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>46.3</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>524,188</td>
<td>16,048</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>75,043</td>
<td>938</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>259,204</td>
<td>9,539</td>
</tr>
<tr>
<td>of which stroke</td>
<td>92,878</td>
<td>2,749</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>14,842</td>
<td>549</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes mellitus</td>
<td>15%</td>
<td>31%</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>75,043</td>
<td>938</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>259,204</td>
<td>9,539</td>
</tr>
<tr>
<td>of which stroke</td>
<td>92,878</td>
<td>2,749</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>14,842</td>
<td>549</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>31%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,199,403</td>
<td>2,459,963</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>172,714</td>
<td>354,235</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>46,777</td>
<td>95,939</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>146,327</td>
<td>300,115</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-4.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>55.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>87.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>20.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>26.6</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(5) High BMI data: NCD Risk Factor Collaboration projections by RTI International.
(6) DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
(7) Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
(8) Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
World Obesity Atlas 2024

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>506,515</td>
<td>14,957</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>152,825</td>
<td>3,355</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>53,583</td>
<td>2,165</td>
</tr>
<tr>
<td>of which stroke</td>
<td>82,744</td>
<td>2,250</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>69,910</td>
<td>2,685</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>509,758</td>
<td>913,550</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>73,405</td>
<td>131,551</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>19,881</td>
<td>35,628</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>62,191</td>
<td>111,453</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 11.6
- Annual increase in GHG emissions 2000–2015 (%): 0.9
- Proportion of the population living in urban areas 2020 (%): n/a
- Annual increase in urbanisation 1995–2020 (%): n/a
- Plastic waste (latest year) (kg per capita): 63.3
- Proportion of adults taking insufficient physical activity 2016 (%): n/a
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): n/a
- Consumption of animal proteins 2021 (grams per capita per day): 56.9
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 27.5

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>154,444</td>
<td>4,665</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>34,337</td>
<td>649</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>52,119</td>
<td>1,919</td>
</tr>
<tr>
<td>of which stroke</td>
<td>38,582</td>
<td>1,224</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>5,207</td>
<td>175</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>16%</td>
<td>27%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>505,352</td>
<td>1,020,298</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>28,470</td>
<td>66,767</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>16,487</td>
<td>33,962</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>43,127</td>
<td>90,957</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>16%</td>
<td>27%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>505,352</td>
<td>1,020,298</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>28,470</td>
<td>66,767</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>16,487</td>
<td>33,962</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>43,127</td>
<td>90,957</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental factor</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.5</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.4</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>27.5</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>-0.20</td>
<td>n/a</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>29.3</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>27.1</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>21.2</td>
<td>n/a</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>586,350</td>
<td>17,584</td>
<td></td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>132,190</td>
<td>3,197</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>80,999</td>
<td>2,897</td>
</tr>
<tr>
<td>of which stroke</td>
<td>171,147</td>
<td>4,995</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>32,768</td>
<td>1,193</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>16%</td>
<td></td>
<td>35%</td>
</tr>
</tbody>
</table>

Numbers of children with high BMI

<table>
<thead>
<tr>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,707,844</td>
<td>12,072,312</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)

Proportion of the population living in urban areas 2020 (%)

Annual increase in urbanisation 1995–2020 (%)

Plastic waste (latest year) (kg per capita)

Proportion of adults taking insufficient physical activity 2016 (%)

Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)

Consumption of animal proteins 2021 (grams per capita per day)

Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,619,286</td>
<td>43,870</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>421,730</td>
<td>7,618</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>210,397</td>
<td>7,588</td>
</tr>
<tr>
<td>of which stroke</td>
<td>387,286</td>
<td>10,046</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>191,848</td>
<td>6,956</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>37,500</td>
<td>54,750</td>
</tr>
<tr>
<td>Stroke</td>
<td>25,000</td>
<td>38,250</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>12,500</td>
<td>19,250</td>
</tr>
<tr>
<td>Diabetes</td>
<td>12,500</td>
<td>19,250</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>12,500</td>
<td>19,250</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1,2)}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>30%</td>
<td>61%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>3,703,203</td>
<td>5,831,580</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>353,618</td>
<td>634,830</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>131,360</td>
<td>212,529</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>376,667</td>
<td>625,760</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2,3)}\)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>51.4</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>2.14</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>68.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>24.6</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>77.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>27.9</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>62.0</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>9,037</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,671</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>1,713</td>
</tr>
<tr>
<td>of which stroke</td>
<td>3,180</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>364</td>
</tr>
<tr>
<td></td>
<td>258</td>
</tr>
<tr>
<td></td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>80,582</td>
<td>212,973</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>5,970</td>
<td>18,851</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>2,733</td>
<td>7,447</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>7,475</td>
<td>21,041</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | n/a |
| Annual increase in GHG emissions 2000–2015 (%) | n/a |
| Proportion of the population living in urban areas 2020 (%) | 31.3 |
| Annual increase in urbanisation 1995–2020 (%) | 1.33 |
| Plastic waste (latest year) (kg per capita) | 8.3 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 17.8 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 89.4 |
| Consumption of animal proteins 2021 (grams per capita per day) | 11.8 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 29.5 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>92,459</td>
<td>2,618</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>17,131</td>
<td>413</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>18,573</td>
<td>634</td>
</tr>
<tr>
<td>of which stroke</td>
<td>29,397</td>
<td>793</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>3,168</td>
<td>114</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>13%</td>
<td>28%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>403,379</td>
<td>1,116,094</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>22,732</td>
<td>73,878</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>13,161</td>
<td>37,212</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>34,428</td>
<td>99,849</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.1</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-2.2</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>42.8</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>1.34</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>15.3</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>9.8</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>8.1</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>22.6</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
**World Obesity Atlas 2024**

**Tonga**

**Projected numbers of adults and children with high Body Mass Index (BMI)**

- **Adults**
- **Children**

**Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019**

- **Person-years lost (DALYS) to NCDs due to high BMI in 2019**
- **Deaths from NCDs due to high BMI in 2019**

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYS)</th>
<th>Deaths from NCDs due to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>4,131</td>
<td>116</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>1,705</td>
<td>44</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>799</td>
<td>26</td>
</tr>
<tr>
<td>of which stroke</td>
<td>552</td>
<td>15</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>313</td>
<td>11</td>
</tr>
</tbody>
</table>

**Deaths from NCDs due to high BMI in adults 2019**

- **Neoplasms**
- **Stroke**
- **Coronary HD**
- **Diabetes**
- **All other NCDs**

**Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)**

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>67%</td>
<td>87%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>23,985</td>
<td>31,233</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,187</td>
<td>3,420</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>843</td>
<td>1,140</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>2,396</td>
<td>3,360</td>
</tr>
</tbody>
</table>

**Environmental correlates of obesity(2)(3)**

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>23.1</td>
<td>22.0</td>
<td>22.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>17.4</td>
<td>17.4</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>85.8</td>
<td>85.8</td>
<td>85.8</td>
<td>85.8</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**REFERENCES:**

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>83,274</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>39,473</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>14,747</td>
</tr>
<tr>
<td>of which stroke</td>
<td>9,212</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>3,426</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>2,611</td>
</tr>
<tr>
<td>Stroke</td>
<td>1,047</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>585</td>
</tr>
<tr>
<td>Diabetes</td>
<td>316</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>139</td>
</tr>
</tbody>
</table>
| Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>95,016</td>
<td>154,590</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>8,332</td>
<td>15,916</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>3,317</td>
<td>5,568</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>9,355</td>
<td>16,207</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>877,569</td>
<td>1,488,388</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>66,952</td>
<td>137,667</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>29,904</td>
<td>52,472</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>82,216</td>
<td>149,525</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlates</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>69.6</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>30.4</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>81.5</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>30.9</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>35.6</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYS) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>2,377,451</td>
<td>80,116</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>534,463</td>
<td>10,875</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>642,605</td>
<td>27,726</td>
</tr>
<tr>
<td>of which stroke</td>
<td>376,198</td>
<td>12,279</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>146,406</td>
<td>6,020</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Disease</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>67,500</td>
<td>62,053</td>
</tr>
<tr>
<td>Stroke</td>
<td>45,000</td>
<td>40,527</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>22,500</td>
<td>18,000</td>
</tr>
<tr>
<td>Diabetes</td>
<td>20,000</td>
<td>15,500</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>20,000</td>
<td>15,500</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>38%</td>
<td>61%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>7,486,301</td>
<td>11,154,858</td>
</tr>
<tr>
<td>of which, children with high blood pressure</td>
<td>611,002</td>
<td>1,072,020</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia</td>
<td>258,000</td>
<td>396,183</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol</td>
<td>718,027</td>
<td>1,137,466</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Program</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas (%)</td>
<td>76.1</td>
<td>76.1</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.82</td>
<td>0.82</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>12.7</td>
<td>12.7</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>30.6</td>
<td>30.6</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>81.3</td>
<td>81.3</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>46.8</td>
<td>46.8</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>26.1</td>
<td>26.1</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>221,643</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>27,771</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>86,047</td>
</tr>
<tr>
<td>of which stroke</td>
<td>69,264</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,888</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>20%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>348,878</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>21,962</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>11,550</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>30,738</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year): 10.2
- Annual increase in GHG emissions 2000–2015 (%): 1.6
- Proportion of the population living in urban areas 2020 (%): 52.5
- Annual increase in urbanisation 1995–2020 (%): 0.64
- Plastic waste (latest year) (kg per capita): 2.0
- Proportion of adults taking insufficient physical activity 2016 (%): n/a
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%): n/a
- Consumption of animal proteins 2021 (grams per capita per day): 45.2
- Consumption of sugar and sweeteners 2021 (kg per capita per year): 20.0

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
World Obesity Atlas 2024

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>301,046</td>
<td>8,378</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>79,811</td>
<td>1,665</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>39,784</td>
<td>1,341</td>
</tr>
<tr>
<td>of which stroke</td>
<td>84,064</td>
<td>2,370</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>20,936</td>
<td>743</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14%</td>
<td>29%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,440,301</td>
<td>7,367,555</td>
</tr>
<tr>
<td>of which, children with high blood pressure</td>
<td>127,131</td>
<td>457,013</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia</td>
<td>78,861</td>
<td>243,414</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol</td>
<td>203,930</td>
<td>646,295</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

- Greenhouse gas (GHG) emissions CO\(_2\) equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).
2. See methodology sections of the World Obesity Federation Atlas 2024
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>2,899,977</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>116,655</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>171,799</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,635,214</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>648,173</td>
</tr>
<tr>
<td></td>
<td>169,440</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Neoplasms</th>
<th>Stroke</th>
<th>Coronary HD</th>
<th>Diabetes</th>
<th>All other NCDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>116,655</td>
<td>121,672</td>
<td>51,718</td>
<td>143,724</td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24%</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,652,367</td>
<td>1,502,755</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high blood pressure</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>118,553</td>
<td>121,672</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with hyperglycaemia</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55,760</td>
<td>51,718</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with low HDL cholesterol</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>151,663</td>
<td>143,724</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.2</td>
<td>5.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of the population living in urban areas 2020 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>65.6</td>
<td>69.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of adults taking insufficient physical activity 2016 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19.6</td>
<td>19.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>76.7</td>
<td>76.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumption of animal proteins 2021 (grams per capita per day)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>45.4</td>
<td>45.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumption of sugar and sweeteners 2021 (kg per capita per year)</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57.8</td>
<td>57.8</td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>372,742</td>
<td>7,622</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>77,451</td>
<td>1,026</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>100,788</td>
<td>2,667</td>
</tr>
<tr>
<td>of which stroke</td>
<td>66,717</td>
<td>1,396</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>22,934</td>
<td>627</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>38%</td>
<td>49%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>468,271</td>
<td>678,987</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>41,561</td>
<td>66,217</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>16,381</td>
<td>24,185</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>46,311</td>
<td>69,640</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult deaths from NCDs</td>
<td>372,742</td>
<td>7,622</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children deaths from NCDs</td>
<td>41,561</td>
<td>66,217</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,717,291</td>
<td>56,213</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>388,827</td>
<td>2,583</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>375,082</td>
<td>19,445</td>
</tr>
<tr>
<td>of which stroke</td>
<td>178,877</td>
<td>7,159</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>247,054</td>
<td>12,726</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>NCD</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>56,213</td>
<td>78,943</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>19,445</td>
<td>28,594</td>
</tr>
<tr>
<td>Stroke</td>
<td>7,159</td>
<td>9,049</td>
</tr>
<tr>
<td>Neoplasms</td>
<td>12,726</td>
<td>15,350</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>28,977</td>
<td>40,245</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>104,874</td>
<td>142,145</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevalence of children with high BMI</strong></td>
<td>36%</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Numbers of children with high BMI</strong></td>
<td>4,310,639</td>
<td>4,829,483</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>325,802</td>
<td>408,515</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>146,665</td>
<td>167,482</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>402,564</td>
<td>469,208</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Correlation</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>6.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-2.5</td>
<td>-2.5</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>83.9</td>
<td>83.9</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.27</td>
<td>0.27</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>93.5</td>
<td>93.5</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>35.9</td>
<td>35.9</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>79.9</td>
<td>79.9</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>64.0</td>
<td>64.0</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>39.8</td>
<td>39.8</td>
</tr>
</tbody>
</table>

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) See methodology sections of the World Obesity Federation Atlas 2024
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>All non-communicable diseases</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12,495,273</td>
<td>393,839</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>2,861,821</td>
<td>41,992</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>2,934,452</td>
<td>140,255</td>
</tr>
<tr>
<td>of which stroke</td>
<td>1,336,271</td>
<td>40,347</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>1,239,333</td>
<td>55,100</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48%</td>
<td>60%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31,288,494</td>
<td>35,233,054</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>2,977,256</td>
<td>3,660,815</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,109,103</td>
<td>1,271,915</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,178,095</td>
<td>3,708,884</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td></td>
<td>15.4</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
<td>-1.8</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td></td>
<td>82.7</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td></td>
<td>104.7</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>40.0</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>72.1</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
<td>85.4</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td>66.3</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).

(2) See methodology sections of the World Obesity Federation Atlas 2024

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

World Obesity Atlas 2024
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>81,240</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>14,802</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>15,674</td>
</tr>
<tr>
<td>of which stroke</td>
<td>15,252</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>11,860</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>260,626</td>
<td>253,068</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>21,410</td>
<td>22,848</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>8,992</td>
<td>8,881</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>25,055</td>
<td>25,189</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

| Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year) | 1.9 |
| Annual increase in GHG emissions 2000–2015 (%) | 1.1 |
| Proportion of the population living in urban areas 2020 (%) | 95.5 |
| Annual increase in urbanisation 1995–2020 (%) | 0.22 |
| Plastic waste (latest year) (kg per capita) | 40.4 |
| Proportion of adults taking insufficient physical activity 2016 (%) | 22.4 |
| Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%) | 82.2 |
| Consumption of animal proteins 2021 (grams per capita per day) | 56.0 |
| Consumption of sugar and sweeteners 2021 (kg per capita per year) | 49.6 |

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²). For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²). Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,293,557</td>
<td>39,316</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>220,831</td>
<td>4,697</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>568,868</td>
<td>20,489</td>
</tr>
<tr>
<td>of which stroke</td>
<td>298,216</td>
<td>8,925</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>41,050</td>
<td>1,348</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>NCDs</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>19%</td>
<td>30%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,656,028</td>
<td>3,398,883</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>100,649</td>
<td>241,819</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>54,562</td>
<td>114,548</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>144,402</td>
<td>311,113</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020 (%)</th>
<th>2025 (%)</th>
<th>2030 (%)</th>
<th>2035 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>n/a</td>
<td>3.0</td>
<td>n/a</td>
<td>3.0</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-3.2</td>
<td>-3.2</td>
<td>-3.2</td>
<td>-3.2</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>50.4</td>
<td>50.4</td>
<td>50.4</td>
<td>50.4</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.57</td>
<td>0.57</td>
<td>0.57</td>
<td>0.57</td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>19.1</td>
<td>19.1</td>
<td>19.1</td>
<td>19.1</td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>47.2</td>
<td>47.2</td>
<td>47.2</td>
<td>47.2</td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>21.0</td>
<td>21.0</td>
<td>21.0</td>
<td>21.0</td>
</tr>
</tbody>
</table>

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
4. Annual growth rates in the projected numbers of adults with high BMI 2020–2035
5. Annual growth rates in the projected numbers of children with high BMI 2020–2035
8. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Vanuatu

Projected numbers of adults and children with high Body Mass Index (BMI)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>12,869</td>
<td>333</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>3,009</td>
<td>63</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>3,729</td>
<td>110</td>
</tr>
<tr>
<td>of which stroke</td>
<td>3,660</td>
<td>93</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>365</td>
<td>12</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary HD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All other NCDs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td></td>
<td>59%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>40,326</td>
<td>83,677</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td></td>
<td>6,806</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>1,345</td>
<td>2,882</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>3,609</td>
<td>8,016</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>873,507</td>
<td>26,817</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>264,026</td>
<td>5,431</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>210,444</td>
<td>8,179</td>
</tr>
<tr>
<td>of which stroke</td>
<td>126,193</td>
<td>3,986</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>37,065</td>
<td>1,472</td>
</tr>
</tbody>
</table>

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>17%</td>
<td>25%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,370,749</td>
<td>1,850,910</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>197,388</td>
<td>266,531</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>53,459</td>
<td>72,185</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>167,231</td>
<td>225,811</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environment</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>88.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>31.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>88.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>29.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>28.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.
DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>1,246,106</td>
<td>37,978</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>285,272</td>
<td>6,462</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>157,436</td>
<td>6,022</td>
</tr>
<tr>
<td>of which stroke</td>
<td>466,066</td>
<td>14,173</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>69,391</td>
<td>2,543</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Non-communicable diseases:
- Diabetes mellitus
- Coronary (ischaemic) heart disease
- Stroke
- Cancers (neoplasms)

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence of children with high BMI</th>
<th>Numbers of children with high BMI</th>
<th>of which, children with high blood pressure attributable to high BMI</th>
<th>of which, children with hyperglycaemia attributable to high BMI</th>
<th>of which, children with low HDL cholesterol attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>13%</td>
<td>2,743,050</td>
<td>173,255</td>
<td>90,852</td>
<td>241,923</td>
</tr>
<tr>
<td>2035</td>
<td>36%</td>
<td>7,572,869</td>
<td>573,770</td>
<td>257,762</td>
<td>707,806</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

- Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)
- Annual increase in GHG emissions 2000–2015 (%)
- Proportion of the population living in urban areas 2020 (%)
- Annual increase in urbanisation 1995–2020 (%)
- Plastic waste (latest year) (kg per capita)
- Proportion of adults taking insufficient physical activity 2016 (%)
- Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)
- Consumption of animal proteins 2021 (grams per capita per day)
- Consumption of sugar and sweeteners 2021 (kg per capita per year)

REFERENCES:
(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

World Obesity Atlas 2024
Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th>NCD Category</th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>410,165</td>
<td>11,778</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>48,416</td>
<td>673</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>155,671</td>
<td>5,074</td>
</tr>
<tr>
<td>of which stroke</td>
<td>97,244</td>
<td>2,664</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>8,451</td>
<td>302</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035(1)(2)

<table>
<thead>
<tr>
<th>Prevalence of children with high BMI</th>
<th>2020 (%)</th>
<th>2035 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,269,359</td>
<td>4,579,772</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>182,788</td>
<td>659,487</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>49,505</td>
<td>178,611</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>154,862</td>
<td>558,732</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity(2)(3)

<table>
<thead>
<tr>
<th>Environmental Factor</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td></td>
<td>-3.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td></td>
<td>37.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td></td>
<td>1.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td></td>
<td>17.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td></td>
<td>86.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td></td>
<td>13.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td></td>
<td>25.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
(3) See methodology sections of the World Obesity Federation Atlas 2024.
(4) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
(5) DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
(6) High BMI data: NCD Risk Factor Collaboration projections by RTI International.
(7) Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
(8) Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Zambia

Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>213,329</td>
<td>6,065</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>45,738</td>
<td>1,009</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>28,391</td>
<td>875</td>
</tr>
<tr>
<td>of which stroke</td>
<td>71,025</td>
<td>2,048</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>10,937</td>
<td>371</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

Early signs of NCDs in children aged 5–19 years, 2020 and 2035\(^{(1)(2)}\)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>15%</td>
<td>28%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,107,653</td>
<td>2,794,911</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>66,492</td>
<td>202,258</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>36,434</td>
<td>94,441</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>96,239</td>
<td>257,255</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity\(^{(2)(3)}\)

<table>
<thead>
<tr>
<th>Environmental correlates</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO(_2) equivalent 2015 (tonnes per capita per year)</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>44.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>22.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>89.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>13.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>15.4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

(1) For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m\(^2\)).

(2) For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m\(^2\)).

(3) Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).

High BMI data: NCD Risk Factor Collaboration projections by RTI International.

DALYs and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.

Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.

Environmental correlates: World Bank, FAO, and other sources (see methodology in 2024 Atlas).
Projected numbers of adults and children with high Body Mass Index (BMI)

Non-communicable diseases (NCDs) in adults attributed to high BMI, 2019

<table>
<thead>
<tr>
<th></th>
<th>Person-years lost (DALYs) to NCDs due to high BMI in 2019</th>
<th>Deaths from NCDs due to high BMI in 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-communicable diseases</td>
<td>220,887</td>
<td>6,474</td>
</tr>
<tr>
<td>of which diabetes mellitus</td>
<td>67,026</td>
<td>1,588</td>
</tr>
<tr>
<td>of which coronary (ischaemic) heart disease</td>
<td>44,724</td>
<td>1,620</td>
</tr>
<tr>
<td>of which stroke</td>
<td>40,443</td>
<td>1,154</td>
</tr>
<tr>
<td>of which cancers (neoplasms)</td>
<td>15,498</td>
<td>549</td>
</tr>
</tbody>
</table>

Deaths from NCDs due to high BMI in adults 2019

- Neoplasms
- Stroke
- Coronary HD
- Diabetes
- All other NCDs

Early signs of NCDs in children aged 5–19 years, 2020 and 2035

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence of children with high BMI</td>
<td>19%</td>
<td>41%</td>
</tr>
<tr>
<td>Numbers of children with high BMI</td>
<td>1,155,173</td>
<td>2,960,933</td>
</tr>
<tr>
<td>of which, children with high blood pressure attributable to high BMI</td>
<td>79,393</td>
<td>253,886</td>
</tr>
<tr>
<td>of which, children with hyperglycaemia attributable to high BMI</td>
<td>38,728</td>
<td>102,932</td>
</tr>
<tr>
<td>of which, children with low HDL cholesterol attributable to high BMI</td>
<td>104,569</td>
<td>289,102</td>
</tr>
</tbody>
</table>

Environmental correlates of obesity

<table>
<thead>
<tr>
<th>Environmental correlate</th>
<th>2020</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas (GHG) emissions CO₂ equivalent 2015 (tonnes per capita per year)</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000–2015 (%)</td>
<td>-2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>32.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995–2020 (%)</td>
<td>0.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic waste (latest year) (kg per capita)</td>
<td>26.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>26.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of youth (age 11–19y) taking insufficient physical activity 2016 (%)</td>
<td>86.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>30.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption of sugar and sweeteners 2021 (kg per capita per year)</td>
<td>29.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES:

1. For 161 countries where data are available, high BMI in children is classified as BMI > 1 s.d. above WHO reference (equivalent to BMI ≥25kg/m²).
2. For 25 countries (see annex in Atlas) overweight is classified as BMI > 2 s.d. above WHO reference (equivalent to BMI ≥30kg/m²).
3. Colour coding in this table shows the country position in world ranking: highest (red), medium (amber), lowest (green).
5. DALY’s and deaths: Institute for Health Metrics and Evaluation Global Burden of Disease database.
6. Children with NCD risk factors: World Obesity Federation (see methodology in 2024 Atlas) and UN population projections.
Annex 1: Sources of data

Prevalence of high BMI

Projections of the prevalence of overweight and obesity for adults and children were produced by RTI International as part of their costing of the consequences of obesity (Okunogbe et al, 2022) with BMI projections based on the NCD-RiSC estimates for overweight and obesity (NCD-RiSC, 2024). To estimate actual numbers of people we have used the prevalence data in conjunction with the projected estimates of national populations published by the United Nations (United Nations Population Division, 2018). Projections for overweight and obesity prevalence in war zones such as Ukraine may be unreliable, and projections for Palestine (West Bank and Gaza) have been excluded as likely to be misleading.

Non-communicable disease attributable to high BMI

Estimates of the numbers and percentages of people affected by NCDs attributable to high BMI have been extracted from the Institute for Health Metrics and Evaluation database for the Global Burden of Disease study 2019 (IHME, 2024). This is due to be updated and extended to 2021 shortly after the present Atlas is published. The 2021 data may show an impact from the Covid-19 epidemic.

Estimates of the early signs of NCDs in children

Estimates and projections for the numbers of children likely to be affected by conditions indicating the early signs of NCDs are based on systematic reviews of prevalence data across a wide range of populations (Lobstein and Jackson-Leach, 2006; Sharma et al, 2019) and recent estimates in middle- and lower-income countries (Africa: Noubiap et al, 2017; China: Wang et al, 2019; India: Meena et al, 2021).

The prevalence estimates used for the present analysis are shown here.

Prevalence of early signs of non-communicable diseases in children according to BMI status

<table>
<thead>
<tr>
<th>Condition</th>
<th>Not with overweight</th>
<th>With overweight not with obesity</th>
<th>With obesity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>3.1%</td>
<td>6.5%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Hyperglycaemia (fasting plasma glucose)</td>
<td>6.6%</td>
<td>9.7%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Low HDL cholesterol</td>
<td>8.1%</td>
<td>15.7%</td>
<td>20.3%</td>
</tr>
</tbody>
</table>

Gross Domestic Product

Gross Domestic Product is an indicator of economic output. Data in this Atlas used GDP per capita, PPP at constant 2017 international $. Downloadable spreadsheet API_NY.GDP.PCAP.PP.KD_DS2_en_csv_v2_6542521 from the World Bank (2024a).
### Environmental correlates of obesity

<table>
<thead>
<tr>
<th><strong>Environmental correlate</strong></th>
<th><strong>Source</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas emissions (GHG) (CO2 equivalent) 2015 (tonnes per capita per year)</td>
<td>International Energy Authority, 2023</td>
</tr>
<tr>
<td>Annual increase in GHG emissions 2000-2015 (%)</td>
<td>International Energy Authority, 2023</td>
</tr>
<tr>
<td>Proportion of the population living in urban areas 2020 (%)</td>
<td>United Nations Population Division, 2018</td>
</tr>
<tr>
<td>Annual increase in urbanisation 1995-2020 (%)</td>
<td>United Nations Population Division, 2018</td>
</tr>
<tr>
<td>Plastic waste (kg per capita)</td>
<td>World Bank, 2024b</td>
</tr>
<tr>
<td>Proportion of adults taking insufficient physical activity 2016 (%)</td>
<td>World Health Organization, 2024 (a)</td>
</tr>
<tr>
<td>Proportion of youth (age 11-19y) taking insufficient physical activity 2016 (%)</td>
<td>World Health Organization, 2024 (b)</td>
</tr>
<tr>
<td>Consumption of animal proteins 2021 (grams per capita per day)</td>
<td>Food and Agriculture Organization of the United Nations, 2024</td>
</tr>
<tr>
<td>Consumption of sugar 2021 (kg per capita per year)</td>
<td>Food and Agriculture Organization of the United Nations, 2024</td>
</tr>
</tbody>
</table>

### References


World Obesity Federation, 2023b. Data supplied by RTI International (personal communications); see also Okunogbe et al (2021) and World Obesity Atlas 2023 (World Obesity Federation 2023a).
Annex 2: Comparison of LMICs with High income countries

Further analysis of World Obesity Atlas 2024 data comparing Low & Middle Income Countries (LMICs) with High income countries.

Adult overweight and obesity 2020-2035. Proportion of those living in World Bank LMICs and High Income Countries

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of adults with high BMI globally, living in LMICs</td>
<td>73%</td>
<td>75%</td>
<td>77%</td>
<td>79%</td>
</tr>
<tr>
<td>% of adults with high BMI globally, living in high income countries</td>
<td>27%</td>
<td>25%</td>
<td>23%</td>
<td>21%</td>
</tr>
<tr>
<td>% of adults with obesity globally, living in LMICs</td>
<td>66%</td>
<td>69%</td>
<td>71%</td>
<td>74%</td>
</tr>
<tr>
<td>% of adults with obesity globally, living in high income countries</td>
<td>34%</td>
<td>31%</td>
<td>29%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Adapted from Table 2.4

Adult overweight and obesity 2020-2035. Number of adults living in World Bank LMICs and High Income Countries

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with high BMI (millions)</td>
<td>2,194</td>
<td>2,524</td>
<td>2,891</td>
<td>3,290</td>
</tr>
<tr>
<td>Adults with obesity (millions)</td>
<td>808</td>
<td>1,001</td>
<td>1,239</td>
<td>1,522</td>
</tr>
<tr>
<td>LMICs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with high BMI (millions)</td>
<td>1,608</td>
<td>1,895</td>
<td>2,222</td>
<td>2,584</td>
</tr>
<tr>
<td>Adults with obesity (millions)</td>
<td>536</td>
<td>688</td>
<td>882</td>
<td>1,121</td>
</tr>
<tr>
<td>High income countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults with high BMI (millions)</td>
<td>586</td>
<td>629</td>
<td>670</td>
<td>706</td>
</tr>
<tr>
<td>Adults with obesity (millions)</td>
<td>272</td>
<td>313</td>
<td>357</td>
<td>401</td>
</tr>
</tbody>
</table>

Adapted from Table 2.4

Deaths of adults attributable to high BMI living in World Bank LMICs and High Income Countries

<table>
<thead>
<tr>
<th></th>
<th>Total deaths 2019 (millions)</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>50.3</td>
<td>5.0m (10%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>41</td>
<td>5.0m (12%)</td>
</tr>
<tr>
<td>LMICs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>39.5</td>
<td>3.9m (10%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>31.5</td>
<td>3.9m (12%)</td>
</tr>
<tr>
<td>High income countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>10.7</td>
<td>1.1m (11%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>9.6</td>
<td>1.1m (12%)</td>
</tr>
</tbody>
</table>

Adapted from Table 2.5

- Of the global deaths from non-communicable diseases that are attributable to high BMI, 78% are from adults living in LMICs compared to 22% in high income countries
### Adult person-years lost to disease (DALYs) attributable to high BMI in World Bank LMICs and High Income Countries

<table>
<thead>
<tr>
<th></th>
<th>Total (in Millions)</th>
<th>Of which, attributable to high BMI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>1871</td>
<td>160m (9%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>1454</td>
<td>160m (11%)</td>
</tr>
<tr>
<td><strong>LMICs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>1535</td>
<td>127.3m (8%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>1162</td>
<td>127.3m (11%)</td>
</tr>
<tr>
<td><strong>High income countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All causes</td>
<td>336</td>
<td>32.4m (10%)</td>
</tr>
<tr>
<td>Of which non-communicable diseases</td>
<td>293</td>
<td>32.4m (11%)</td>
</tr>
</tbody>
</table>

Adapted from Table 2.6

- Of the global DALYs from non-communicable diseases that are attributable to high BMI, 80% are from adults living in LMICs compared to 20% in high income countries

### Child overweight and obesity 2020-2035. Proportion of those living in World Bank LMICs and High Income Countries

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of children with high BMI globally, living in LMICs</td>
<td>82%</td>
<td>85%</td>
<td>87%</td>
<td>88%</td>
</tr>
<tr>
<td>% of children with high BMI globally, living in high income countries</td>
<td>18%</td>
<td>15%</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>% of children with obesity globally, living in LMICs</td>
<td>82%</td>
<td>84%</td>
<td>84%</td>
<td>85%</td>
</tr>
<tr>
<td>% of children with obesity globally, living in high income countries</td>
<td>18%</td>
<td>16%</td>
<td>16%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Adapted from Table 3.2

### Child overweight and obesity 2020-2035. Numbers of children living in World Bank LMICs and High Income Countries

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with high BMI (millions)</td>
<td>433</td>
<td>550</td>
<td>660</td>
<td>773</td>
</tr>
<tr>
<td>Children with obesity (millions)</td>
<td>197</td>
<td>244</td>
<td>285</td>
<td>329</td>
</tr>
<tr>
<td>LMICs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with high BMI (millions)</td>
<td>355</td>
<td>467</td>
<td>573</td>
<td>683</td>
</tr>
<tr>
<td>Children with obesity (millions)</td>
<td>162</td>
<td>204</td>
<td>240</td>
<td>281</td>
</tr>
<tr>
<td>High income countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children with high BMI (millions)</td>
<td>78</td>
<td>83</td>
<td>87</td>
<td>90</td>
</tr>
<tr>
<td>Children with obesity (millions)</td>
<td>35</td>
<td>40</td>
<td>44</td>
<td>48</td>
</tr>
</tbody>
</table>

Adapted from Table 3.2