About COSI
The WHO European Childhood Obesity Surveillance Initiative (or COSI) is a unique system that for over 10 years has measured trends in overweight and obesity among primary school aged children. COSI involves taking standardized weight and height measurements from over 300,000 children across the WHO European Region every three years. This provides nationally representative data for participating countries, as well as a large Region-wide data set for analysis of the determinants of childhood overweight and obesity. This vital collaboration between the World Health Organisation and research institutions from across Europe provides high-quality data that is needed to inform policy and practice in response to the problem of childhood overweight and obesity.

A Growing Initiative

The COSI system is simple to implement and does not consume many resources. The COSI protocol and manual of procedures allow each participating country to develop a system that fits its local circumstances. Each country is responsible for national data collection and analysis - an institute in each country is in charge of overall national coordination and management. The methodology is standardized, allowing comparisons between countries and over time. Data are analysed both at national level and by the surveillance initiative team at WHO/Europe, which conducts common cross-country analyses of the pooled dataset. The data management process is completed in collaboration with in-country teams and the information is disseminated through reports and scientific publications.
Overweight and obesity among children aged 6-9 years

Obesity in children remains an important public health problem in the WHO European Region and it is unequally distributed within and between countries and population groups.

Childhood obesity is a multifactorial disease associated with a wide range of serious health and social consequences including a higher risk of premature death and disability in adulthood.

Overweight and obesity prevalence values based on WHO definition \(^a\) (%) – COSI 2015-2017

Changes over time: 10 years of COSI

Since COSI started in 2007, 12 countries have participated in at least 3 rounds of data collection \(^b\). A significant decrease in the prevalence of both overweight and obesity was recorded in Greece, Italy, Portugal and Slovenia. A decreasing tendency was also observed in Ireland and Spain. Belgium, Czechia and Norway have stable prevalences; whereas the picture is less definite in Bulgaria, Latvia and Lithuania. An increasing tendency in obesity was observed among Latvian girls and Bulgarian boys. A similar pattern has been recorded among Lithuanian boys for both overweight and obesity \(^c\).


\(^b\) Figures refer to children belonging to the following age groups: 7-year-olds: Bulgaria (BUL); Czechia (CZH); Denmark (DEN); Estonia (EST); Finland (FIN); Georgia (GEO); Hungary (HUN); Ireland (IRE); Lithuania (LTU); Latvia (LVA); Malta (MAT); The former Yugoslav Republic of Macedonia (MKD); Montenegro (MNE); Moscow city (RUS); Portugal (POR); Spain (SPA); Serbia (SRB); Slovakia (SVK); Slovenia (SVN); Tajikistan (TJK); Turkmenistan (TKM); Turkey (TUR) – 8-year-olds: Albania (ALB); Austria (AUT); Croatia (CRO); France (FRA); Italy (ITA); Norway (NOR); Poland (POL); Romania (ROM); San Marino (SMR); Sweden (SWE) – 9-year-olds: Cyprus (CYP); Kazakhstan (KAZ).

\(^c\) Above-mentioned differences are not statistically significant in BUL, LTU, LVA, IRE, SPA.
Lifestyle behaviours

Children age by country

In addition to the physical measurements that are used to calculate levels of overweight and obesity, information on the obesity-related behaviours of study participants is collected through a questionnaire for the parents of study participants.

Eating habits

Eating habits are an important factor in children becoming overweight and obese. COSI collects some information on health-related behaviours to provide the information necessary for policy-makers to design, implement and evaluate the effectiveness of policies and strategies aimed at improving diets. Greater availability and affordability of energy-dense, nutrient-poor foods and drinks has contributed to an environment that encourages weight gain and in which many children now grow up. Regularly eating breakfast, daily consumption of fruits and vegetables and limited consumption of foods such as savoury snacks, fast foods, processed meat products and sugary soft drinks reduce the risk of becoming overweight or obese.

Over a typical or usual week, how often does your child have breakfast?

*Parents’ participation in the survey was high in most of the countries, except in Albania, Denmark and Ireland where it was below 40%. In Lithuania and Montenegro parents of around 2 out of 3 children enrolled in selected classes filled in the family form. In all other countries, the participation rate was higher than 70%, with the highest values recorded in Italy, San Marino and Turkmenistan (above 90%).
Lifestyle behaviours

Children’s Eating Habits

Over a typical or usual week, how often does your child consume the following kinds of foods or beverages?

FRUITS

Every day | Never or less than once a week
---|---
ALB | 58 | 4
BUL | 35 | 5
CRO | 34 | 5
DEN | 60 | 3
GEO | 61 | 10
IRL | 73 | 6
ITA | 33 | 9
KAZ | 19 | 23
LTU | 9 | 6
LVA | 37 | 5
MNE | 2 | 6
POL | 46 | 11
POR | 63 | 5
ROM | 81 | 2
RUS | 3 | 6
SMR | 29 | 8
SPA | 33 | 21
TJK | 70 | 2
TKM | 1

VEGETABLES

Every day | Never or less than once a week
---|---
ALB | 27 | 10
BUL | 27 | 8
CRO | 17 | 8
DEN | 4 | 14
GEO | 17 | 12
IRL | 54 | 30
ITA | 46 | 10
KAZ | 14 | 17
LTU | 18 | 17
LVA | 9 | 6
MNE | 23 | 7
POL | 38 | 13
POR | 74 | 35
ROM | 15 | 6
RUS | 43 | 9
SMR | 15 | 15
SPA | 68 | 1
TJK | 1 | 1
TKM | 1

© WHO 2016
Lifestyle behaviours

Children's Eating Habits contd

Over a typical or usual week, how often does your child consume the following kinds of foods or beverages?

**SAVOURY SNACKS**

<table>
<thead>
<tr>
<th>Country</th>
<th>More than three days a week</th>
<th>Never or less than once a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALB</td>
<td>41</td>
<td>26</td>
</tr>
<tr>
<td>BUL</td>
<td>45</td>
<td>12</td>
</tr>
<tr>
<td>CRO</td>
<td>50</td>
<td>8</td>
</tr>
<tr>
<td>DEN</td>
<td>57</td>
<td>17</td>
</tr>
<tr>
<td>GEO</td>
<td>49</td>
<td>8</td>
</tr>
<tr>
<td>IRE</td>
<td>63</td>
<td>14</td>
</tr>
<tr>
<td>KAZ</td>
<td>83</td>
<td>3</td>
</tr>
<tr>
<td>LVA</td>
<td>80</td>
<td>3</td>
</tr>
<tr>
<td>MNE</td>
<td>77</td>
<td>4</td>
</tr>
<tr>
<td>POL</td>
<td>85</td>
<td>2</td>
</tr>
<tr>
<td>POR</td>
<td>49</td>
<td>2</td>
</tr>
<tr>
<td>ROM</td>
<td>70</td>
<td>1</td>
</tr>
<tr>
<td>RUS</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>SPA</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>TJK</td>
<td>54</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>More than three days a week</th>
<th>Never or less than once a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALB</td>
<td>69</td>
<td>18</td>
</tr>
<tr>
<td>BUL</td>
<td>65</td>
<td>29</td>
</tr>
<tr>
<td>CRO</td>
<td>54</td>
<td>39</td>
</tr>
<tr>
<td>DEN</td>
<td>46</td>
<td>25</td>
</tr>
<tr>
<td>GEO</td>
<td>50</td>
<td>22</td>
</tr>
<tr>
<td>IRE</td>
<td>88</td>
<td>22</td>
</tr>
<tr>
<td>KAZ</td>
<td>72</td>
<td>3</td>
</tr>
<tr>
<td>LVA</td>
<td>62</td>
<td>12</td>
</tr>
<tr>
<td>MNE</td>
<td>43</td>
<td>32</td>
</tr>
<tr>
<td>POL</td>
<td>60</td>
<td>43</td>
</tr>
<tr>
<td>POR</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>ROM</td>
<td>69</td>
<td>43</td>
</tr>
<tr>
<td>RUS</td>
<td>84</td>
<td>69</td>
</tr>
<tr>
<td>SPA</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>TJK</td>
<td>42</td>
<td>42</td>
</tr>
<tr>
<td>TKM</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>
Lifestyle behaviours

Children's Physical Activity

Physical activity patterns are closely linked to the energy imbalances that result in children becoming overweight and obese. The benefits of physical activity, which includes active play, walking, cycling and participation in sports, are important for children's physical and mental health and habitual physical activity is associated with lower levels of overweight in children. WHO recommends that children carry out at least 60 minutes of moderate-to-vigorous physical activity a day, but only a small proportion of children currently meet this recommendation. Active transportation, such as walking or cycling, is associated with higher levels of physical activity and cardiovascular fitness but in many countries the proportion of children walking or cycling to or from school has been declining.

Going to and from school on foot or bike

Time spent playing actively/vigorously (e.g. running, jumping outside or moving and fitness games inside)

Time spent on practicing sports and physical activities with sport clubs or dancing courses
Lifestyle behaviours

Children's Sedentary Behaviours

Concerns have been raised that the time children spent watching television or using electronic media (screen time) is displacing unstructured play and resulting in more sedentary time and less physical activity. This has promoted some national authorities to issue guidance for parents about limiting their children's screen or sedentary time. Short sleep duration is another energy-related behaviour that is independently associated with weight gain and adiposity in childhood.

Outside school lessons, how much time does your child usually spend watching TV or using electronic devices such as computer, tablet, smartphone or other electronic device, either at home or outside home?

At what time does your child usually go to bed on school days (weekdays)?

& At what time does your child usually wake up on school days (weekdays)?