



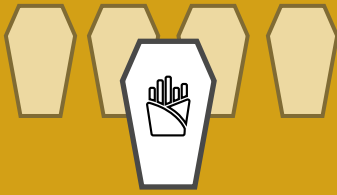
World Health
Organization

REGIONAL OFFICE FOR
Europe



Factsheet - Sustainable Development Goals: health targets

Nutrition, overweight and obesity



GLOBALLY IN 2017:

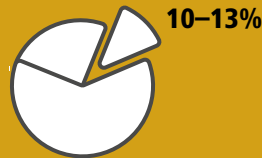
One in five deaths is associated with poor diet (an estimated 11 million deaths)



Diets high in sodium, low in whole grain and low in fruit together accounted for more than half of all diet-related deaths



Excessive intake of energy, salt, saturated and trans-fats and free sugars leads to an increased risk of noncommunicable diseases such as cardiovascular diseases, cancer and diabetes

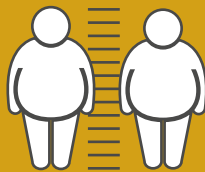


The prevalence of obesity is estimated to account for 10–13% of deaths in different parts of the WHO European Region



More than 50% of adults in 46 Member States are overweight or obese, and in several of these Member States it is close to 70%

Data from the WHO European Childhood Obesity Surveillance Initiative (COSI) show that in several Member States almost 40% of boys aged 6–9 years were overweight and almost 20% were obese in 2015–2017



Infants and young children are being exposed to high levels of added, free and total sugar from commercial baby foods, despite WHO's recommendation to limit free sugars in foods for this age group and to reduce total sugar to <10% of energy for older children




In Member States where undernutrition persists, the prevalence of stunting in children under-5 years of age is high (17.5% in Tajikistan in 2017)


Nutrition Facts	
Calories	230
	% Daily Value
Total Fat 8g	10%
Saturated fat 1g	5%
Trans Fat 0g	
Total Carbohydrate	0%
Dietary Fiber	7%
Total Sugars 12g	13%
Includes 10g Added Sugars	14%
Protein 3g	


Nutrition, overweight and obesity

Unhealthy diets and excess body weight are leading risk factors for death and disability in the WHO European Region (1). Addressing malnutrition in all its forms is essential to ensure health and well-being for all and, consequently, sustainable development. It requires coherent and innovative actions covering the entire food system and across other sectors to ensure access to a diversified, balanced and healthy diet for all (2).


 Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients (3). Historically, this has been addressed as two separate broad groups of conditions:


- ☞ undernutrition, which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies
- ☞ (a lack of important vitamins and minerals); and
- ☞ overweight/obesity and diet-related noncommunicable diseases (NCDs) such as heart disease, stroke, diabetes and cancer.

 The double burden of malnutrition described the coexistence of these two groups within individuals, households and populations, and across the life-course (4).

 The prevalence of stunting and wasting has been declining rapidly in the WHO European Region since the 1990s (5), whereas rates of overweight and obesity are increasing and are priority concerns (4). However, there are still Member States undergoing nutritional and

demographic transitions and experiencing the double burden of malnutrition. In addition, micronutrient deficiencies and food insecurities persist in some at-risk communities.

 In these cases, interventions, programmes and policies that have the potential to reduce the risk and consequences of the double burden of malnutrition are needed. These are known as double-duty actions (6). The drivers of malnutrition are complex, but governments have a major role to play in ensuring that the food supply system provides access to safe, nutritious and sufficient food all year round (7).

 The Action Plan for the Prevention and Control of Noncommunicable Diseases in the WHO European Region (8) calls for Member States to take action to improve healthy diets, and the European Food and Nutrition Action Plan (4) provides specific guidance and policy action areas. These policy documents highlight the importance of implementing effective national population-based approaches that promote healthy diets, which can support the achievement of the Sustainable Development Goals (SDGs).

2
ZERO
HUNGER



3
GOOD HEALTH
AND WELL-BEING



4
QUALITY
EDUCATION



5
GENDER
EQUALITY



10
REDUCED
INEQUALITIES



11
SUSTAINABLE CITIES
AND COMMUNITIES



12
RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13
CLIMATE
ACTION



Facts and figures



Reduce the number of men, women and children living in poverty

- Diets in the WHO European Region as a whole are characterized by an overall energy imbalance and excessive intake of sugar, fats and salt, often consumed as manufactured foods and sugar-sweetened beverages. At the same time, inadequate consumption of vegetables, fruits and whole grains remains a significant challenge (9). Available data indicate that:
 - adults in the WHO European Region are universally consuming more than the recommended 5% of energy from added sugars (roughly 25 g/day of added sugars, assuming an average daily diet of 2000 kcal);
 - many children and adolescents consume more than 10% of their daily energy intake from added sugars (roughly 50 g/day), with young men having the highest absolute intakes (10); and
 - although major advances have taken place to reduce or eliminate the availability of trans-fats in the food supply in the WHO European Region (historically a major problem), there are still concerns in some Member States (11).
- Throughout the food supply chain, there remain conflicting incentives and disincentives for producers, manufacturers and retailers to continue using saturated fats, trans-fats, sugar and salt in manufactured foods (10).
- Governments can stimulate reformulation of manufactured foods and influence consumer demand to favour healthier products through initiatives such as labelling, marketing restrictions and taxes on the saturated fat, trans-fats, sugar and salt content in manufactured foods and drinks (10).
- Ensuring the wider availability of minimally processed foods through short supply chains has the potential to contribute significantly to creating healthy and sustainable food systems and supporting local economies, while ensuring that agriculture policies are consistent with overall SDGs and health impacts (12,13).
- Food production systems also play an essential role in the fight against antimicrobial resistance. Global consumption of antimicrobial drugs in food/animal production was estimated at 63 000 tonnes in 2010 and is projected to rise by 70% by 2030 (14,15). Under a One Health approach, containment of antimicrobial resistance would be supported by effective surveillance of trends in antimicrobial drug consumption and resistance in agriculture and veterinary sectors, the implementation of animal immunization and the promotion of improved hygiene and biosecurity to reduce unnecessary use of antimicrobial drugs.



End all forms of malnutrition

- The prevalence of obesity is estimated to account for 10–13% of deaths in different parts of the Region (16).
- More than 50% of adults in 46 Member States (accounting for 87% of the Region) are overweight or obese, and in several of these Member States it is close to 70% (4).
- High rates of childhood obesity are particularly concerning. Data from the WHO European Childhood Obesity Surveillance Initiative (COSI) reveal that in several Member States almost 40% of boys aged 6–9 years were overweight and almost 20% were obese in 2015–2017 (Box 1) (17,18). Although the rising trends of childhood obesity have reached a plateau in many high-income countries, the rates remain unacceptably high (16,19) and they are still accelerating in middle-income countries (20,21).
- Data from COSI have also indicated worryingly high rates of severe obesity among primary schoolchildren in some countries of the Region (22).
- In contrast, micronutrient deficiencies, notably of iron and iodine, are still prevalent across the Region (23).
- In Member States where undernutrition persists, the prevalence of stunting in children under-5 years of age is high, being 17.5% in Tajikistan in 2017 (24), indicating that, although significant progress has been made, more needs to be done to end malnutrition in its various forms.



Box 1. Leaving no one behind

Monitoring and surveillance: ensuring that no one is left behind requires good monitoring and surveillance to gain understanding of the population.

With this need in mind, COSI measures trends in overweight and obesity among primary schoolchildren aged 6–9 years, in order to understand progress of the epidemic of obesity in children, gain intercountry comparisons within the WHO European Region and inform action to reverse the trend (18).

COSI is established in over 40 Member States of the WHO European Region, with the number of countries growing with each data collection round. It is a unique system that provides a large dataset, with over 300 000 children in the Region, based on nationally representative samples and standardized weight and height measurements.



Reduce premature mortality from NCDs

- ☞ Poor nutritional status, unhealthy diets, excess body weight and physical inactivity are among the leading risk factors for death and disability from NCDs in the WHO European Region (1). Estimates in 2016 indicated that more than 40 million disability-adjusted life-years were lost every year linked to dietary risks in the Region (25).
- ☞ Reduction of salt and sugar consumption and the elimination of industrial trans-fats are among the most cost-effective “best buy” interventions to reduce the burden of NCDs (26).



Reduce global maternal mortality and end preventable deaths of newborns and children under-5 years of age

- ☞ Obesity before and during pregnancy and excessive gestational weight gain have been associated with pregnancy-related complications and short- and long-term adverse effects in the offspring, including an increased susceptibility to obesity and diet-related NCDs (24,27,28).
- ☞ Strong and consistent evidence also shows that exclusive breastfeeding provides for optimal growth and plays a role in protecting against overweight and obesity in childhood and the risk of developing NCDs later in life (29). However, rates of exclusive breastfeeding are lower in the WHO European Region than in any other WHO region, with approximately 13% of infants being exclusively breastfed during the first 6 months of life (23).
- ☞ Commercially marketed baby foods in the WHO European Region provide up to a third of energy intake from sugar, on average, with use of added sugar widespread (30).



Achieve universal health coverage

- ☞ The rising burden of diet-related NCDs endangers the sustainability of health systems through accompanying high treatment costs. Obesity alone is responsible for 2–8% of health costs (31). Countries should consider increasing the coverage of effective nutrition interventions and making them part of universal health coverage.
- ☞ Counselling at-risk individuals in primary care has been identified as a “best buy” for the prevention of acute cardio- and cerebrovascular events among high-risk patients. It is estimated to have a positive effect on obesity and related NCDs, and to have a favourable cost–effectiveness ratio (less than US\$ 50 000 per disability-adjusted life-year) compared with treatment of NCDs once they emerge (32).



Ensure that everyone has the knowledge and skills needed to promote sustainable lifestyles and sustainable development

- ☞ The school environment is a key area for supporting the promotion of health literacy and the adoption of healthy lifestyle habits and healthy diets.
- ☞ Lower educational status has been associated with a higher prevalence of obesity in adults, which is more prominently among adult women in the WHO European Region. While 26% of obesity in men in the European Union can be attributed to inequalities in education status, the figure for women is 50% (33).
- ☞ Evidence has shown that school-based interventions are effective in changing eating behaviour and preventing overweight and obesity. Multicomponent behaviour change interventions are the most effective, especially when supported by changes to the school food environment (4,34).



SDG 10.2. Promote universal social, economic and political inclusion

- ☞ Across the WHO European Region, rates of overweight and obesity vary geographically, among socioeconomic groups and by gender (2).
- ☞ An estimated 27% of all adolescent obesity in 2014 was attributable to socioeconomic differences (21). Social inequalities in adolescent obesity track strongly into adulthood (33), calling for greater consideration of social and economic inequalities (35,36).
- ☞ Childhood obesity prevalence varies across countries and regions but is generally higher among boys (21).
- ☞ Girls often have a negative body image, with 40% of girls across the Region reporting dissatisfaction with their bodies, almost double the rate seen for boys (20). This can have health-related implications, including unhealthy eating behaviours and mental health problems (20).
- ☞ In adults, men tend to be less knowledgeable than women about healthy eating habits and lifestyles (32).



11.A, 12.3 and 13.2. Support positive economic, social and environmental links between urban and rural areas, reduce wasteful food losses and integrate climate change measures into national policies

- ☞ Growing evidence highlights the impacts of food systems and cities on health, nutrition and the environment. One major challenge is to ensure access to diverse and adequate diets for the world's population in a sustainable manner. Sustainability, climate change, biodiversity, water, food and nutrition security, and the right to food and adequate diets are all closely connected (37).
- ☞ Urban environments can concentrate health risks, particularly those built environments characterized by poor planned or unplanned urban housing, transport and food systems that prevent citizens practising active mobility or accessing safe and healthy foods (38).
- ☞ Climate variability and extremes have significant impacts on food production and agriculture, which inevitably lead to major shifts in food systems worldwide, affecting food production, distribution and consumption (39).
- ☞ “Win-win” cross-cutting opportunities arise from the promotion of sustainable cities and communities from municipal to global levels, such as investment in active transport systems, sustainable agriculture practices and food systems, from production to consumption; this has the potential to address climate change gas emissions and other environmental indicators and to promote health (40).
- ☞ The Sustainable Healthy Diet describes a diet characterized by low environmental pressure and impact and that is accessible, affordable, safe and equitable as well as culturally acceptable (41,42).

Commitment to act

Member States of the WHO European Region, acknowledging the challenges posed by NCDs, have committed in a number of global and European frameworks to reduce the major NCD risk factors, including unhealthy diets (2,4,8,43–46).

At the 64th session of the WHO Regional Committee for Europe in September 2014, Member States adopted the WHO European Food and Nutrition Action Plan 2015–2020 (4), committing to “avoid premature deaths and significantly reduce the burden of preventable diet-related noncommunicable diseases, obesity and all other forms of malnutrition still prevalent in the WHO European Region” (4).

The Action Plan proposes objectives, priority areas and actions with particular attention to the burden of NCDs (3,17). Member States are encouraged to adapt their national nutrition strategies, considering the priority intervention areas identified:

- ☞ create healthy food and drink environments;
- ☞ promote the gains of a healthy diet throughout the life-course, especially for the most vulnerable;
- ☞ reinforce health systems to promote healthy diets;
- ☞ support surveillance, monitoring, evaluation and research (Box 2); and
- ☞ strengthen governance, intersectoral alliance and networks for a health-in-all-policies approach (Box 2).

Box 2. Intersectoral action

A healthier food environment: an individual’s nutritional status is not solely a matter of personal choice but is heavily influenced by a wide range of social and environmental factors affecting the availability, affordability and acceptability of different foods. There is a strong relationship between low socioeconomic status, obesity and unhealthy diets, attributable in part to the increase in cheap, palatable and energy-dense foods that are much more accessible, convenient and heavily promoted in retail settings, in addition to their aggressive marketing through different channels.

Many countries are, therefore, considering policies to transform the obesogenic environment into a healthier food environment. This requires engagement and collaboration of the health sector with sectors such as education, agriculture, finance/treasury and the media.

An example of successful intersectoral action using a fiscal tool to promote healthier food choices and raise revenues for public health was the public health product tax in Hungary (47). The tax decreased unhealthy food consumption by increasing the price of unhealthy food products and creating a cost barrier. More than two thirds of people who changed products chose a healthier alternative. The decrease has generally been maintained (32). The tax has also achieved its economic goals, as the planned revenue has been realized each year, which has made it possible to increase the wages of health sector workers by 25% in two stages.

Monitoring progress

The following global indicator frameworks of the United Nations Economic and Social Council (ECOSOC) (48) and the WHO 13th General Programme of Work (GPW) (49) will support monitoring progress in ending malnutrition.

SDG indicators

- **21.1.** Prevalence of undernourishment
- **21.2.** Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
- **2.2.1.** Prevalence of stunting (height for age ≤ 2 standard deviation from the median of the WHO Child Growth Standards (50)) among children under-5 years of age
- **2.2.2.** Prevalence of malnutrition (weight for height ≥ 2 or ≤ 2 standard deviation from the median of the WHO Child Growth Standards (50)) among children under-5 years of age, by type (wasting and overweight)
- **3.4.1.** Mortality rate attributed to cardiovascular diseases, cancer, diabetes or chronic respiratory disease

GPW indicators

- **21.1.** Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease measured by probability of dying between the exact ages of 30 and 70 years
- **24.1.** Age- standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years
- **14.1.** Prevalence of stunting (height for age ≤ 2 standard deviation from the median of the WHO Child Growth Standards (50)) under-5 years of age
- **15.1.** Prevalence of wasting (weight-for-length or height < -2 standard deviation from the median of the WHO Child Growth Standards (50)) among children under-5 years of age
- **25.1.** Prevalence of childhood overweight (0–4 years)
- **25.2.** Prevalence of childhood obesity (5–19 years)

Monitoring and surveillance

Effective monitoring and surveillance are essential to gain an understanding of the health status of the population and to identify vulnerable groups. In line with this need, COSI measures overweight and obesity among schoolchildren aged 6–9 years in order to understand trends in childhood obesity, allow intercountry comparisons within the WHO European Region and inform actions to reverse unwanted trajectories (18). COSI provides a unique dataset of standardized information on childhood obesity in 40 Member States, allowing monitoring of trends (Box 1).

The WHO STEPwise approach to noncommunicable disease risk factor surveillance (STEPS) was established to strengthen surveillance of NCD risk factors globally (51). The survey protocol involves three steps: (i) an interview-administered questionnaire (including behavioural risk factors such as diet), (ii) physical measurements (e.g. weight and height), and (iii) biochemical measurements (e.g. blood glucose). From 2010 to 2019, STEPs was implemented in 11 Member States of the Region. As the survey uses a standardized methodology, repeat surveys can show trends over time and it is recommended that the survey is repeated every five years. By the end of 2019, four countries had conducted the survey more than once, which provides important data on trends and can help to inform the development and evaluation of policy actions to promote healthy diets.

WHO support to its Member States

The WHO Regional Office for Europe supports countries in meeting goals related to nutrition and obesity through the following activities:

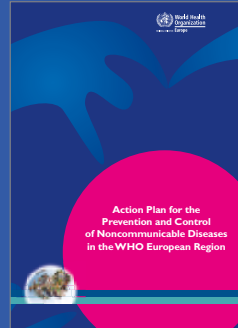
- ☞ providing evidence-informed guidance on what works best for health in terms of optimal nutrient intake and healthy diets;
- ☞ defining priority policies and reviewing the evidence for what policies and interventions work best in current conditions, based on a rigorous scientific framework;
- ☞ helping countries to adopt, adapt and implement this guidance at the country level through technical support (training, facilitation and consultation); and
- ☞ monitoring and evaluating policy and programme implementation and nutrition outcomes.

Partners

The WHO Regional Office for Europe works with multiple partners to address malnutrition in all its forms. These include WHO collaborating centres for nutrition, European Union initiatives, other United Nations agencies, intergovernmental organizations, academic and research institutions, civil society and nongovernmental organizations.

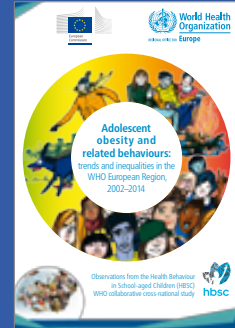
Within the Regional Office, the WHO European Office for the Prevention and Control of NCDs (NCD Office) in Moscow specializes in providing support to Member States for policy development, surveillance, prevention and management of NCDs. The NCD Office manages the COSI and STEPs surveillance systems and leads innovative actions related to nutrition, overweight and obesity.

Resources



Action plan for the prevention and control of noncommunicable diseases in the WHO European Region (2016)

<https://apps.who.int/iris/handle/10665/341522>



Adolescent obesity and related behaviours: trends and inequalities in the WHO European Region, 2002–2014

<https://apps.who.int/iris/handle/10665/329417>



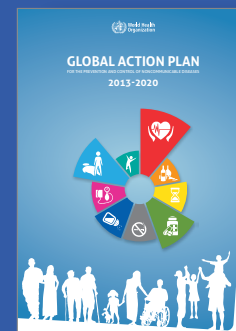
Comprehensive implementation plan on maternal, infant and young child nutrition

https://www.who.int/nutrition/publications/CIP_document/en/



European food and nutrition action plan 2015–2020

<https://apps.who.int/iris/handle/10665/329405>



Global action plan for the prevention and control of NCDs 2013–2020

<https://www.who.int/nmh/publications/ncd-action-plan/en/>

Key definitions

Body mass index	Commonly used to classify underweight, overweight and obesity and calculated as a person's weight (in kilograms) divided by the square of their height (in metres). A limitation is that it does not distinguish weight associated with muscle from weight associated with fat (52).
Double burden of malnutrition	<p>The coexistence of undernutrition and overweight/obesity, or diet-related NCDs, within individuals, households or populations, and across the life-course:</p> <ul style="list-style-type: none">☞ individuals with simultaneous presence of two or more types of malnutrition or with development of multiple types over a lifetime;☞ households with multiple family members affected by different forms of malnutrition; and☞ populations with both undernutrition and overweight prevalence in community, region or nation.
Double-duty actions	Interventions, programmes and policies that have the potential to simultaneously reduce the risk or burden of undernutrition (including wasting, stunting and micronutrient deficiency or insufficiency) and overweight, obesity or diet-related NCDs (6). This reflects the shared drivers and platforms of contrasting forms of malnutrition and can be achieved at three levels: doing no harm with regard to existing actions on malnutrition; retrofitting existing nutrition actions to address or improve the status of new or other forms of malnutrition; and development of de novo integrated actions aimed at the double burden of malnutrition.
Food systems	All elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation, consumption and disposal of food, and the outputs of these activities, including socioeconomic and environmental outcomes (53).
Indicators of malnutrition	Underweight, stunting, wasting and overweight are used to measure nutritional imbalance. Child growth is internationally recognized as an important indicator of nutritional status and health in populations.
Obesity and overweight	Overweight is generally considered as a body mass index ≥ 25.0 kg/m ² and obesity as a body mass index ≥ 30.0 kg/m ² in adults (aged 19 years and over). Overweight is a risk factor for a range of diseases and conditions and is included in the WHO International Classification of Diseases, 10th revision (54).
Standard deviation and Z-score classification system	Standard deviation (SD) is a measure of the amount of variation of a set of values; a low SD indicates that the values tend to be close to the mean of the set, while a high SD indicates that the values spread out over a wider range. Negative values are below the mean, positive ones above it. The Z-score indicates how much a given value differs from the SD. The system is used to describe anthropometric data for a child or a group of children compared with a reference population.
Stunting	Low height for age that reflects the cumulative effects of undernutrition and infections occurring both before and subsequent to birth.
Wasting	Low weight for height, which in children is a symptom of acute undernutrition. It usually is a consequence of insufficient food intake or a high incidence of infectious diseases, especially diarrhoea. Wasting, in turn, impairs the functioning of the immune system and can lead to increased severity and duration of, and susceptibility to, infectious diseases and an increased risk for death.

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