



## **SDG 3, Good Health and Well-being: Combating and Preventing Childhood Obesity in Developed Countries – Examples of Norway and Japan**

The intention of Sustainable Development Goal 3 (SDG 3) is to ‘*ensure healthy lives and promote well-being for all at all ages*’. One of the greatest health challenges faced by rapidly developing countries is obesity. It is a civilization disease that brings many dangerous consequences – it is strongly associated with more than 50 medical conditions, and many cause-and-effect relationships have been proven in Mendelian randomisation studies (Lam et al., 2023). Adults with obesity, compared to individuals with a healthy body weight, have a threefold higher risk of diabetes, hypertension, shortness of breath, and sleep apnoea, a two- to threefold increased risk of coronary heart disease, heart failure, joint degeneration, and gout, as well as a one- to twofold higher relative risk of developing many types of cancer, infertility, or complications during anaesthesia (Iłowiecka et al. 2021; citing Haslam et al. 2006).

Adult obesity has its origins in the presence of the disease in childhood and adolescence. According to data, 69% of obese children aged 6–9 remain obese in adulthood, and among the 10–14 age group, obesity persists into adulthood in 83% of cases. It is worth noting that obesity persisted more often in children who had at least one obese parent (Reilly et al. 2003). Childhood obesity is most often associated with lowered self-esteem and the presence of cardiovascular risk factors: hypertension, dyslipidemia; abnormalities in left ventricular function, impaired endothelial function, as well as hyperinsulinemia and/or insulin resistance (Reilly et al. 2003).

The COSI (Childhood Obesity Surveillance Initiative) studies conducted as part of a WHO initiative indicate that in countries participating in the study between 2022 and 2024, 25% of children aged 7–9 overall were overweight, and among them, 10% were obese. Significant differences persist between countries, with the overall prevalence of overweight ranging from 9% to 42%, and obesity from 3% to 20%. According to WHO estimates, in 2024, approximately 35 million children under the age of 5 were overweight.

Actions in the areas of food production, transport, land use, and urban planning – if carried out in line with sustainable development principles – can benefit the climate and help reduce diseases that place a significant economic burden on national economies. As obesity and overweight constitute significant risk factors for disease and disability, combating them and



supporting prevention are essential to ensuring health and well-being for people of all ages, as well as achieving sustainable development (Skouteris et al. 2014; Yamaguchi et al. 2025).

One of the few countries reporting low increases in the number of children with obesity, and relatively low estimated prevalence of obesity among boys and girls aged 7–9 according to the most recent available COSI data, is Norway. Norway achieved its best results before the pandemic, between 2010 and 2019, when the prevalence of overweight and obesity among girls was halted and reduced among boys.

Norway's efforts to combat childhood obesity span many areas and fields. One of the initiatives was the implementation of the so-called 'First Steps' module – a three-stage paediatric program focused on detecting excessive weight gain in children and initiating action by a team of midwives and specialists to prevent further weight gain in the youngest children (Westergren et al., 2021). A screening program for monitoring anthropometric data (weight and height) is also carried out in schools. In addition to measurements, children and parents participate in educational meetings about healthy eating.

In primary schools, the 'Skolefrukt' (School Fruit) program was introduced, under which every student receives a free portion of fruit or vegetables each school day (Bere et al. 2015). Recently, the Norwegian Storting introduced a ban on any form (including event sponsorship) of marketing food products high in sugar, saturated fats, or salt to children and adolescents under the age of 18. This includes chocolate, jams, juices, breakfast cereals, and ice cream (Norwegian Journal: Food Act 2025). In May 2025, Norway was officially recognised by the WHO as one of four countries (alongside Austria, Oman, and Singapore) to be effectively eliminating industrial trans fats from food products (<https://www.who.int/news/item/19-05-2025-who-recognizes-four-countries-with-life-saving-trans-fat-elimination-policies>).

A country that stands out in childhood obesity statistics is Japan. Japan generally has a lower rate of childhood obesity compared to many other developed nations. For example, comparing the United States and Japan, which have similar economic conditions, the prevalence of childhood obesity is 18.6% in the U.S. and only 3.9% in Japan (Zhang et al. 2024).

How does a country with one of the world's most advanced economies maintain such favourable obesity statistics?

In Japan and other Southeast Asian countries, traditional diets play a significant role. The Japanese diet, including that of children, still consists primarily of fresh and pickled vegetables, fish, seaweed, and mushrooms, with smaller amounts of meat, which is often replaced by tofu. Hearty soups based on dashi and wholegrain products also form part of their daily meals. All of this is supported by the principle of 'hara hachi bu' – eating until 80% full



– which makes the traditional ‘washoku’ diet beneficial for health (Zhang et al. 2024). Healthy eating principles are promoted in schools, where students receive balanced meals developed by nutritionists under the ‘kyushoku’ program. An additional benefit of ‘kyushoku’ is the low rate of food waste, which is around 6.9% (according to a study on school lunch food waste conducted by the Ministry of the Environment in 2014) (Asakura and Sasaki 2017).

Unfortunately, both the prevention of obesity and the fight against the disease itself remain challenging, as interviews and surveys reveal that patients often do not perceive excess body weight as an important issue (McHale et al. 2020).

The examples of Norway and Japan show, however, that diverse measures taken to reduce and prevent overweight and obesity can bring positive results. It should be emphasised that the health of children forms the foundation of their future well-being as adults and investing in their proper physical and mental development is crucial for building a healthy, productive society and achieving the goals of sustainable development.

### Questions

1. What are the main health consequences of childhood obesity? How do these relate to SDG 3 and the idea of ‘well-being for all at all ages’?
2. How does Japan’s approach to childhood obesity differ from Norway’s? Which approaches do you find more effective or sustainable, and why?
3. To what extent can traditional diets, like the Japanese ‘washoku’, be preserved and promoted in the face of globalisation and fast-food culture?
4. Discuss the role of schools in preventing childhood obesity. What elements of the Norwegian and Japanese school programs (like ‘Skolefrukt’ or ‘Kyushoku’) could be implemented in your country or your local community? Do you know of any similar programs in your surroundings?
5. How can public policy (e.g., banning food marketing to children) influence eating habits and health outcomes among young people? Do you think such policies can be helpful?
6. What social or psychological factors contribute to the lack of concern about obesity among patients and parents, as described in the text? How can these attitudes be changed?
7. Why is it important to focus on early childhood and adolescence in obesity prevention programs rather than only treating obesity in adulthood?
8. In what ways do urban planning and transportation systems contribute to obesity prevention? Can you provide examples?



9. How can international organisations like the WHO support countries in their efforts to reduce childhood obesity? What are the challenges of coordinating global actions on this issue?

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