



Viewpoint

Preventing childhood obesity – what we can learn from Japan

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Abstract

The prevalence of being overweight or obese among children is increasing rapidly worldwide, placing a heavy burden on healthcare systems. However, Japan has one of the lowest rates of childhood obesity worldwide. Lifestyle factors such as physical activity and eating habits play a crucial role in the development of overweight and obesity. Physical activity forms the basis of Japan's public health strategy. Daily routines are designed to encourage physical activity. A notable example of this is walking or cycling to school. Additionally, schools play a central role in promoting physical activity through compulsory sports programmes. Another cornerstone of Japan's strategy to combat overweight and obesity is the 'Shokuiku' nutrition education programme. The Shokuiku School Lunch Law stipulates that school meals must meet strict nutritional standards and be prepared using fresh, locally sourced ingredients. Integrating nutrition education into everyday life means that what is learnt in the classroom leads to lasting behavioural changes. Japan's active commutes to school and nutrition education programmes instil healthy habits from an early age.

Prävention von Adipositas bei Kindern – was wir von Japan lernen können

Weltweit breiten sich Übergewicht und Adipositas bei Kindern immer stärker aus und belasten die Gesundheitssysteme enorm. Im weltweiten Vergleich hat Japan jedoch eine der niedrigsten Prävalenzen von Übergewicht bei Kindern. Lebensstilfaktoren wie körperliche Aktivität und Ernährungsgewohnheiten spielen eine entscheidende Rolle bei der Entstehung von Übergewicht und Adipositas. Körperliche Aktivität ist ein Grundpfeiler der japanischen Strategie im Bereich der öffentlichen Gesundheit. Tägliche Routinen sind darauf ausgerichtet, körperliche Aktivität zu fördern. Ein prominentes Beispiel ist der Schulweg, der zu Fuß oder mit dem Fahrrad zurückgelegt wird. Darüber hinaus spielen Schulen eine zentrale Rolle bei der Förderung von Bewegung durch obligatorische Sportprogramme. Ein weiterer Eckpfeiler der japanischen Strategie zur Bekämpfung von Übergewicht und Adipositas ist das Ernährungsbildungsprogramm „Shokuiku“. Das Shokuiku-Schulessen-Gesetz schreibt vor, dass Schulmahlzeiten strengen Ernährungsstandards entsprechen und Zutaten aus regionalem Anbau verwenden müssen. Durch die Integration der Ernährungserziehung in den Alltag führt das im Unterricht Gelernte zu dauerhaften Verhaltensänderungen. Der aktive Schulweg und das Programm zur Ernährungserziehung tragen dazu bei, von klein auf gesunde Lebensgewohnheiten zu vermitteln.

日本の子どもたちの肥満予防 — 日本から学ぶもの

過体重や肥満の子ども有病率は世界中で急速に増加してきており、医療制度に大きな負担をかけている。しかし日本は、世界でも子どもの肥満率が最も低い国の一つである。運動や食習慣といった生活習慣の要因は、過体重や肥満の発症に重大な役割を果たしている。運動は日本の公衆衛生分野の方針の基盤をなす。毎日のルーティンが運動を促すように設計されており、その顕著な例が徒歩や自転車での通学である。さらに学校は、体育の授業が必修であることを通して運動を促進する中心的な役割を担っている。日本の肥満対策のもう一つの柱が「食育」栄養教育の授業である。食育学校給食法は、学校給食は厳格な栄養基準を満たし、地元産の新鮮な食材を使用すべきと規定している。栄養教育を日常生活に統合することで、教室で学んだことが持続的な行動の変化につながる。日本の徒歩・自転車通学と栄養教育授業は、幼い頃から健康的な習慣を身につけさせる。

Keywords: Children; Japan; Obesity; Shokuiku; Physical Activity; Prevention; Public health.

The prevalence of being overweight or obese among children is increasing rapidly worldwide, placing a heavy burden on healthcare systems (Zhang et al., 2024). Childhood obesity has steadily increased in prevalence and severity for over 50 years and has now reached epidemic proportions. UNICEF recently reported that, for the first time, there are now more overweight than underweight children worldwide. This development poses significant public health challenges, as childhood obesity increases the risk of obesity and cardiometabolic diseases, as well as premature mortality in adulthood.

Japan has not been immune to the upward trend in childhood obesity. Nevertheless, it still has one of the lowest childhood obesity rates in the world. For example, while up to one-third of children in Germany are overweight or obese, this figure is less than one in five in Japan. Focusing on obese children alone, their proportion in Germany is approximately double that in Japan.

Lifestyle factors, such as physical activity and eating habits, play a crucial role in the development of overweight and obesity (Lange, 2017; Lange, 2023; Lange, 2024). Programmes aimed at preventing childhood obesity should focus on making structural improvements to children's living environments. This involves improving the spaces where children eat, play, and learn. In this context, certain Japanese customs, eating habits and health-related policies warrant particular attention (Lange and Nakamura, 2024).

Physical activity is a cornerstone of Japan's public health strategy, deeply rooted in the country's cultural and social norms. Japanese children benefit from an environment that actively promotes exercise (Inoue et al., 2020). Their daily routines are designed to encourage physical activity. One notable example is walking or cycling to school (Mori et al., 2012; Lange, 2025). This common practice is supported by urban planning that prioritises pedestrian- and bicycle-friendly infrastructure. For decades, walking or cycling to school has been the norm for the majority of Japanese children. Local education authorities ensure that school routes are practical and safe. In urban areas, schools are often located close to children's homes, making walking the most convenient option. Safety measures such as parental and community volunteer supervision help to maintain this routine.

In addition, schools play a central role in promoting physical activity by offering compulsory sports programmes. As well as developing motor skills and improving fitness, these programmes emphasise teamwork and discipline, instilling a lifelong appreciation of an active lifestyle. Extracurricular sports clubs are another integral part of this. They enable students to specialise in various activities and participate in competitions. This further reinforces the importance of regular exercise. Furthermore, schools organise sports programmes and sports days outside the regular curriculum, in which students and their families can participate. These activities promote physical health and strengthen a sense of community and collective responsibility for well-being. Japan's communities also actively promote physical activity through organised sporting events,

recreational programmes and easily accessible public spaces. Initiatives such as sports festivals and fitness classes in parks encourage children and their families to adopt a culture of regular exercise and active living that lasts into adulthood.

Another cornerstone of Japan's strategy to combat obesity and excess weight is the 'Shokuiku' nutrition education programme, which was formalised by law in 2005 (Kawano, 2009; Lange and Nakamura, 2025). The programme emphasises the importance of nutritional literacy, a balanced diet and healthy eating habits for promoting physical and mental wellbeing, as well as the cultural significance of food. At a national level, Shokuiku establishes standardised nutrition education guidelines to ensure consistent implementation across the country. Schools play a central role in this framework by integrating nutrition education into their curricula. The Shokuiku School Lunch Law stipulates that school meals must meet strict nutritional standards and be prepared using fresh, locally sourced ingredients. This is not a common policy in many other countries. Unlike in many Western countries, meal preparation in Japanese schools is usually carried out on site to ensure high-quality nutrition, rather than being outsourced. By handling food, children learn what is and isn't healthy. Students actively participate in serving meals and cleaning up afterwards. This promotes a sense of responsibility and respect for food. This system ensures that children receive at least one nutritious and affordable meal a day, thereby teaching them healthy eating habits for life. Integrating Shokuiku into the curriculum enables children to learn about various aspects of nutrition, such as the origin of food, how it is prepared and the cultural significance of traditional Japanese dishes. Parents are also encouraged to develop healthy eating habits. Workshops and community campaigns help them to do this. When nutrition education becomes part of everyday life, what is learned in the classroom can lead to lasting behavioural changes. Cultural traditions also encourage these efforts by promoting habits such as portion control and mindful eating. These habits are reinforced by the education system and community initiatives.

It is important to develop healthy habits from an early age, as those acquired in childhood tend to become deeply ingrained and difficult to change later in life (Jakobovich et al., 2023). Key strategies include establishing consistent routines and modelling healthy behaviour. Japan's lifestyle, which incorporates active commutes to school and nutrition education programmes, helps to instil healthy habits from an early age. Japanese health policy is based on prevention and education. It focuses on creating lifelong healthy habits in early childhood. These strategies for establishing lifelong habits could also serve as a model for other countries.

However, future challenges for health and education policy in Japan include the increasing consumption of potentially unhealthy ready meals and highly processed foods, as well as the increased use of digital and social media, which is often associated with a sedentary lifestyle. These issues must be addressed by societies and policymakers around the world (Lange, 2017).

Conflict of interest

The authors declared no conflict of interest.

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