

How to stop obese children from having heart disease in adulthood

July 25 2023



Credit: CC0 Public Domain

Childhood is a window of opportunity to tackle obesity before the damage it causes is irreversible, according to a scientific statement by experts on heart disease and childhood obesity published today in the

European Journal of Preventive Cardiology. The document was produced by the Task Force for Childhood Health of the European Association of Preventive Cardiology (EAPC) of the ESC and the European Childhood Obesity Group (ECOG).

Childhood obesity is on the rise. According to the World Health Organization, while less than 1% of children and adolescents aged 5-19 were obese in 1975, more 124 million (6% of girls and 8% of boys) were obese in 2016. "The global rise in [childhood obesity](#), to a large extent driven by more [physical inactivity](#), has been linked with an increased prevalence of high blood pressure, [blood lipids](#) and [blood glucose](#) in childhood," said first author Professor Henner Hanssen of the University of Basel, Switzerland. "This combination of factors is in turn linked with damage to the arteries and heart, which can be reversed with exercise in children but much less so in adults."

Childhood obesity and the associated problems of high blood pressure, blood lipids and blood glucose track into adulthood. For example, [obese children](#) are five times more likely to become obese adults than their healthy weight peers. The document emphasizes the need to tackle obesity and the accompanying risk factors together, as having more than one problem compounds the likelihood of cardiovascular disease (CVD) in adulthood.

Compared to children with a low body mass index (BMI), those with a high BMI are 40% more likely to suffer from CVD in midlife. Children with a combination of risk factors including smoking and high BMI, blood pressure and blood lipids have a two- to nine-fold greater risk of heart attack and stroke in midlife.

Habits also track into adulthood, giving further impetus to the argument to intervene now. "Prevention of adult coronary [heart disease](#) through interventions in childhood is supported by the fact that dietary habits and

[food preferences](#) are formed early in life and that family-related lifestyle and eating habits tend to be maintained throughout the life span," states the paper.

School-age young people should do at least 60 minutes per day of moderate to vigorous aerobic physical activity. In addition, muscle strengthening activities should be done at least three times per week. Sedentary time, particularly screen time, should be limited. Regarding diet, children should eat an adequate breakfast, avoid eating between meals, eat three meals and no more than two snacks per day, limit portion sizes, avoid energy-dense and nutrient-poor foods such as [fruit juices](#) or fast food, increase intake of unprocessed fruit, vegetables and fiber-rich cereals, and lower fat and sugar intake.

A range of policies and actions are needed to stop obesity and the associated problems in their tracks. Central to these are physical activity and nutrition. Policymakers should:

- Promote physical activity and raise awareness of the need to reduce sedentary time
- Encourage healthy eating habits
- Provide diet counseling and psychological support for behavior change
- Reduce unhealthy food marketing in media and social media
- Promote parenting styles that encourage physical activity and [healthy eating](#)
- Avoid stigmatization
- Involve schools, family and friends in education programs
- Increase availability and affordability of healthy food
- Provide playgrounds and green spaces to be physically active in urban settings.

"Policies to stop CVD later in life need to go beyond just telling [young](#)

[people](#) to exercise and eat a healthy diet," said Professor Hanssen. "If there are no spaces to enjoy being active and nutritious food is unavailable or unaffordable, it is very difficult to change behavior. Some children will benefit from psychological support to understand which habits are problematic and how to develop new ones. And instead of criticizing children for being inactive and eating junk food, schools and parents can show that being physically active and preparing healthy food is fun."

Schools should take the lead with healthy school meals, cooking classes, education about nutrition and activity, and sports clubs. Family and friends should be invited to take part, as both have an influence on a child's lifestyle and weight. Professor Hanssen said, "Healthy, affordable diets should start at the school canteen and physical activity can be promoted through active breaks at schools. Education about healthy lifestyles won't have much of an impact if parents are not involved."

The document points to the influence of the media on children's diets. It notes: "Most children are exposed to promotion and marketing of products such as [fast food](#) and sugar-sweetened beverages up to about 200 times per week on social media." The authors state that marketing of unhealthy food and drink should be minimized or prohibited, especially in schools, since it influences children's behavior. While the equivalent marketing of healthy products appears to have no effect, Professor Hanssen said, "Instead of marketing simply telling people to consume healthy products, promoting a healthy lifestyle as fun and cool may be more effective."

The document stresses the need to avoid stigmatization of overweight and obese children as this could push them towards eating disorders and inactivity. "How to identify children at risk and offer individual treatment while avoiding stigmatization remains challenging and this needs to be addressed sensitively," said Professor Hanssen. "At school

level, for example, all children and families may benefit from prevention strategies, from the healthy canteen to active breaks."

He concluded, "Prevention of CVD needs to start early. Rather than wait and see whether or not today's obese children become tomorrow's heart attacks and strokes, an action plan is needed now to put a halt to future health problems. We already know that obesity is harming children's health. What more proof do we need?"

More information: Henner Hanssen et al, Lifestyle Interventions to Change Trajectories of Obesity-Related Cardiovascular Risk from Childhood Onset to Manifestation in Adulthood A joint Scientific Statement of the Task Force for Childhood Health of the European Association of Preventive Cardiology (EAPC) and the European Childhood Obesity Group (ECOG), *European Journal of Preventive Cardiology* (2023). [DOI: 10.1093/eurjpc/zwad152](https://doi.org/10.1093/eurjpc/zwad152)

Provided by European Society of Cardiology

Citation: How to stop obese children from having heart disease in adulthood (2023, July 25) retrieved 28 April 2024 from

<https://medicalxpress.com/news/2023-07-obese-children-heart-disease-adulthood.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--