

Most high blood pressure in children and teenagers is linked with unhealthy lifestyle

July 27 2022



Credit: Unsplash/CC0 Public Domain

Inactivity, diets high in sugar and salt, and excess weight account for nine in ten cases of high blood pressure in children and adolescents, according to a consensus paper by heart health experts published today

in *European Heart Journal*, a journal of the European Society of Cardiology (ESC). The document, which focuses on hypertension in 6 to 16 year-olds, recommends that families get healthy together.

"Parents are significant agents of change in the promotion of [children's](#) health behaviors," said first author Professor Giovanni de Simone of the University of Naples Federico II, Italy. "Very often, [high blood pressure](#) and/or obesity co-exist in the same family. But even when this is not the case, it is desirable that lifestyle modifications involve all family members."

Dietary recommendations for treating high blood pressure in children include emphasizing fresh vegetables, fruits, and other high-fiber foods, limiting salt intake, and avoiding sugar-sweetened drinks and saturated fat. Children and adolescents should do at least one hour of moderate-to-vigorous physical activity every day, such as jogging, cycling or swimming, and spend no more than two hours a day on sedentary activities. "Parents should monitor the amount of time their children spend watching TV or using smartphones and suggest active alternatives," said Professor de Simone.

Realistic goals should be set for weight, diet, and physical activity that focus on the aspects needing the most improvement. "Recording weight, eating habits and exercise over time—but without becoming obsessive—can help young people and their families to track progress towards their goals," said Professor de Simone.

A "health-promoting reward system" is recommended. Professor de Simone said, "Ideal incentives are those that increase social support and reinforce the value of targeted behaviors, such as a family bike ride or a walk with friends."

The document refers to childhood obesity and hypertension as "insidious

siblings" which gradually become a serious health hazard. Studies have shown that childhood hypertension is becoming more common and that part of the increase can be explained by obesity, particularly abdominal [obesity](#). It is estimated that less than 2% of normal-weight children are hypertensive, compared to 5% of overweight and 15% of obese children. Professor de Simone said, "The rise in childhood hypertension is of great concern as it is associated with persistence of hypertension and other cardiovascular problems during adulthood."

Early diagnosis of elevated blood pressure is crucial so that it can be managed with lifestyle, and if needed, medications. Even one blood pressure measurement by a doctor or nurse can identify children with high blood pressure, but a second visit is recommended for confirmation. Professor de Simone said, "Screening should be performed in the primary care setting at least yearly, regardless of symptoms. This is because hypertension in children, as in adults, is usually asymptomatic."

When blood pressure measurements point to hypertension, a medical history and physical examination are needed to determine potential causes and identify behaviors that can be modified. Information includes family history of hypertension and [cardiovascular disease](#), birth weight and gestational age; details on lifestyle such as smoking, salt intake, alcohol consumption, physical exercise and leisure time activities; and possible symptoms including headache, nosebleeds, vertigo, visual impairment, low school performance, attention difficulties, shortness of breath, chest pain, palpitations and fainting.

In the early stages, treatment of childhood hypertension should focus on education and behavior change. If blood pressure goals are not achieved, a single low-dose drug should be introduced. If one drug is ineffective, small doses of two drugs may be needed.

The authors call for public health agencies to prioritize prevention and management of [hypertension](#) in children and adolescents. For example, campaigns to increase awareness of the risks of high blood pressure in young people and the positive impact of a healthy lifestyle including physical activity, a nutritious diet low in salt and sugar, and not smoking. Other recommended actions include protected time for children on TV and social media without promotion of junk food or potentially deleterious lifestyle habits.

The consensus document was prepared by the ESC Council on Hypertension, European Association of Preventive Cardiology, European Association of Cardiovascular Imaging, Association of Cardiovascular Nursing & Allied Professions, ESC Council for Cardiology Practice, and Association for European Paediatric and Congenital Cardiology.

More information: Giovanni de Simone et al, Hypertension in children and adolescents, *European Heart Journal* (2022). [academic.oup.com/eurheartj/art ... 93/eurheartj/ehac328](https://academic.oup.com/eurheartj/article/43/9/eurheartj/ehac328)

Provided by European Society of Cardiology

Citation: Most high blood pressure in children and teenagers is linked with unhealthy lifestyle (2022, July 27) retrieved 25 April 2024 from <https://medicalxpress.com/news/2022-07-high-blood-pressure-children-teenagers.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>
--