FACTS

Salt

Reducing Sodium in the Diets of American Children

OVERVIEW
Around 90% school-age children in the United States consume more sodium than recommended. High blood pressure was once generally considered to be an illness that affected mainly middle-aged and older individuals. However, due to lifestyle changes over the past 30 years, there has been an increase in the rates of obesity and type 2 diabetes among adolescents as well as an increase in the average blood pressure level and prevalence of hypertension in children and adolescents. High blood pressure is a major risk factor for cardiovascular disease, which is the leading cause of death in the United States. High blood pressure can also increase the risk for stroke, osteoporosis, stomach cancer, and kidney disease. Importantly, studies suggest that infants’ and children’s preference for the taste of sodium is formed by dietary exposure, meaning the less sodium children consume, the less they want.

The American Heart Association advocates for a stepwise reduction in sodium consumption in the U.S. diet for children and adults by 2020. This, combined with a nutritious diet that relies on fruits and vegetables, whole grains, low-fat and nonfat dairy products, beans, fish, and lean meats could help to improve the health of this generation of Americans.

THE CURRENT STATE OF AFFAIRS
- Children currently consume most of their salt in ten common food types: pizza, breads, cold cuts, savory snacks, sandwiches, cheese, poultry, mixed pasta dishes, Mexican dishes, and soups. These foods account for nearly 43% of sodium eaten by children.
- The Healthy, Hunger-Free Kids Act of 2010 mandated a gradual, 12 year reduction to align sodium levels in school meals with the Dietary Guidelines. The first phase has already been implemented and schools have until the 2022 school year to meet the recommended amounts.
- Children ages 6-18 years old consume an average of nearly 3,300 mg/day of sodium each day and much of the sodium in foods even before salt is added at the table. Boys tend to consume more sodium than girls and children between the ages of 14 and 18 typically consume more than 3,600 mg of sodium per day.
- The Institute of Medicine has established a sodium intake upper limit of 1,900 mg for children aged 4-8; 2,200 mg for children 9-13; and 2,300 mg for children 14-18. On average, children eat more than 3,200 mg of sodium daily.
- One in six children has elevated blood pressure.
- Analysis of data from the Search for Diabetes in Youth Study found that the prevalence of elevated blood pressure among those with type 1 diabetes was 5.9% and the prevalence of elevated blood pressure among those with type 2 diabetes was 23.7%.
- Non-Hispanic black children and Mexican-American children generally have a greater prevalence of high blood pressure and prehypertension than non-Hispanic white children, and the prevalence is greater in boys than in girls.


- Represents the association’s recommendation of less than 1,500mg/sodium/day.
The opportunity to address lower sodium levels for children can be seen as early as infancy.4

THE POPULATION AT RISK
The proportion of obese adolescents with pre-hypertension and hypertension combined is nearly 30%.16 A study estimated that up to 74% of hypertensive children are not diagnosed with the condition.17 Studies have shown that children with high blood pressure show signs of enlargement of the left ventricle in the heart and thickening of the arteries and diastolic dysfunction.18 Additionally, hypertension in childhood is correlated with high blood pressure in adulthood.19

ECONOMIC AND HEALTH BENEFITS
The total direct and indirect cost of cardiovascular diseases is estimated to be over $320 billion a year, with hypertension alone costing $46.4 billion.2 A 9.5% drop in sodium intake would likely result in nearly one million fewer cardiac events a year; a savings of over $32 billion.20 A reduction in hypertension in childhood today could result in longer, healthier lives and may lower hospitalization costs in the future.

THE ASSOCIATION ADVOCATES
The opportunity to address lower sodium levels for children can be found in a broad range of initiatives. The American Heart Association will:

- Protect and support implementation of the evidence-based sodium standards for school meals and Smart Snacks.
- Support procurement standards for foods purchased by government agencies and employers that include criteria for strict sodium limits.
- Advocate for increasing availability of fruits and vegetables in schools through commodities, food purchasing, school gardens, the Fresh Fruit and Vegetable Program, and the fruit and vegetable standards in school meals.
- Support improving access to and affordability of fruits and vegetables in the community by providing various incentives. Examples include: incentives for small and mid-size farms to produce specialty crops that can be distributed locally and regionally; the Farmers’ Market Promotion Program, which fosters community-led approaches to improve consumer access to healthy and fresh foods in low income neighborhoods; the Healthy Food Financing Initiative, which helps bring grocery stores into food deserts and low-income communities; and incentives in the Supplemental Nutrition Assistance Program (SNAP) which promote the purchase of healthy foods, especially fruits, vegetables, and high-fiber, whole grains.
- Advocate for other privately or publicly funded initiatives that support the purchase of healthy foods such as Double Up Food Bucks21 and Wholesome Wave.22
- Support efforts by food manufacturers, restaurants, and other foodservice companies to reduce sodium in their products and support the Food and Drug Administration’s efforts to issue voluntary recommendations for the sodium content of foods.

6 Mennella, JA, Finkelstein, S, Lipchak, SV, Hwang, LD, & Reed, DR. (2014). Preferences for salty and sweet tastes are elevated and related to each other during childhood. Public Library of Science One, 9(3), e92201.

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