Highlights

Sodium and Potassium Intakes Among US Infants and Preschool Children, 2003–2010

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Most US preschoolers consume too much sodium, and nearly all do not consume enough potassium, according to a new study published in the *American Journal of Clinical Nutrition* titled "Sodium and Potassium Intakes Among US Infants and Preschool Children, 2003–2010."

Too much sodium and too little potassium are related to high blood pressure, also called hypertension. High blood pressure is a leading risk factor for heart disease, stroke, and other cardiovascular diseases. Between 1999 and 2008, the prevalence of elevated blood pressure for boys and girls aged 8–17 years was estimated to be 19.2% and 12.6%, respectively. High blood pressure in childhood may lead to high blood pressure in adulthood—and high blood pressure in adults is associated with early development of cardiovascular disease and risk for premature death.

Some studies suggest sodium and potassium together may impact blood pressure more than either nutrient alone. In this study, for the first time, CDC researchers examined the sodiumto-potassium ratio among infants and preschool children.

Intake amounts do not match recommended levels.

- 79% of children aged 1–3 years and 87% aged 4–5 years consumed too much sodium, with an average intake of 2,504 milligrams (mg) per day for the older group.
- Black children aged 1–5 years consumed more sodium than children in any other racial or ethnic group.
- Less than 10% of children aged 1–5 years consumed enough potassium each day.
- Breastfed infants and children consumed less sodium and potassium than other groups, on average.



* In 2005, the Institute of Medicine (IOM) established a Tolerable Upper Intake Level for sodium of 2,300 mg per day for adults. It represents the highest daily intake that does not appear to carry risks of negative health effects in normal, healthy people. Levels for children were inferred from adult levels based on typical age-specific caloric intake. No level was set for infants.

Opportunities for Action

Pay attention to sodium and potassium in your child's diet.

- Most of the sodium we eat is added during processing or preparation and cannot be taken out.
- Taste preferences for salty foods may be established early in life, so the less sodium children consume, the less they want.
- Different brands of the same food may have different levels of nutrients— check food labels carefully.

Reduce sodium and increase potassium in young children's diets.

- Read the Nutrition Facts labels and choose lower sodium options.
- · Ask for lower sodium alternatives when eating out.
- Add more healthy sources of potassium to your family's diet; such as, low-fat milk, fruits, and vegetables without added salt.
- Support changes to improve meals served in child care centers and schools.
- Promote breastfeeding for 12 months as recommended by the American Academy of Pediatrics.

IOM Dietary Reference Intakes for Infants and Children (in mg)

	Sodium (UL)*	Potassium (AI)**
Infants		700
1–3 years	1,500	3,000
4-5 years	1,900	3,800

- Tolerable Upper Intake Level (UL) is the maximum level of daily nutrient intake that is likely to pose no risk of adverse effects.
- ** Adequate Intake (AI) is the average daily nutrient intake level by a group (or groups) of apparently healthy people that are assumed to be adequate. According to the Institute of Medicine (IOM), "Mean usual intake at or above this level implies a low prevalence of inadequate intakes."



National Center for Chronic Disease Prevention and Health Promotion Division for Heart Disease and Stroke Prevention