

Healthy Beverage Consumption in Early Childhood

Recommendations from Key National Health and Nutrition Organizations

Healthy Eating Research

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BACKGROUND AND RATIONALE

Establishing healthy dietary patterns in early childhood is important to help prevent future diet-related chronic diseases, as well as to support overall health and optimal physical and cognitive growth and development. Research shows that what children drink – from birth through age 5 – can have a big impact on their health, as beverages make a significant contribution to dietary intake during this period. However, with so many choices available in the marketplace, it can be confusing for parents and caregivers to know which drinks are healthy and which ones to avoid. Thus, it's not surprising that many young children's beverage intakes diverge from current evidence-based recommendations. For example, many infants consume cow's milk and 100% juice before their first birthday, which can increase their risk for nutrient deficiencies, such as anemia. Among 2 to 5-year-olds, close to half (44%) consume a sugar-sweetened beverage (SSB) daily, and the prevalence of SSB consumption increases throughout childhood. Many of these beverages contain added sugars and saturated fats, which can be harmful when consumed in excess. There are also significant differences in beverage intake by race/ethnicity and income groups in early childhood that need to be addressed.

Many authoritative bodies have issued guidance and recommendations for healthy beverage intake, but important gaps exist as these recommendations have not been comprehensive in the age groups covered or in the types of beverages discussed. There are also inconsistencies in certain aspects of existing recommendations, such as suggested consumption amounts or recommended ages for introduction, potentially contributing to misunderstanding among health care providers, parents, and caregivers.

Given the importance of beverage consumption in early childhood and the need for comprehensive and consistent evidence-based recommendations, Healthy Eating Research (HER), a national program of the Robert Wood Johnson Foundation (RWJF), convened an expert panel representing four key national health and nutrition organizations and a scientific advisory committee to develop comprehensive recommendations for beverage consumption consistent with a healthy diet for children from birth to age 5. The four organizations represented on the expert panel are (in alphabetical order) the Academy of Nutrition and Dietetics (the Academy), the American Academy of Pediatric Dentistry (AAPD), the American Academy of Pediatrics (AAP), and the American Heart Association (AHA).



More information, including the full report, videos, infographics, and resources for parents and caregivers, can be found at www.healthdrinkshealthykids.org.










APPROACH

The expert panel was comprised of two representatives from each of the four national health and nutrition organizations, a chair, and a research consultant. Panelists were experts in pediatrics, nutrition, and dentistry. HER also recruited a scientific advisory committee of six individuals with extensive expertise in establishing dietary guidance, early childhood nutrition, and nutrition science. HER employed a multi-step process to develop the evidence-based recommendations, including: an extensive review of existing guidelines and reports from domestic and international authoritative bodies on recommendations for beverage consumption during early childhood; additional topic-specific structured narrative reviews of the scientific literature where there was a lack of evidence or where existing recommendations were inconsistent; and meetings of the expert panel and advisory committee to review the evidence, discuss gaps, conduct literature reviews, agree on research terms and content, and develop the final consensus recommendations. The final recommendations were reviewed and approved by all participating organizations and individuals.

RECOMMENDATIONS

The resulting recommendations are presented in 3 categories: 1) Beverages recommended as part of a healthy diet (plain drinking water and plain, pasteurized milk); 2) Beverages to limit (100% juice); and 3) Beverages not recommended as part of a healthy diet in early childhood (plant milks/non-dairy beverages,¹ flavored milk, toddler milk, sugar-sweetened beverages, beverages with low-calorie sweeteners, and caffeinated beverages). These recommendations are intended for healthy children in the United States, and do not address medical situations in which specific nutrient guidance is warranted to manage acute or chronic conditions.

SUMMARY OF KEY PANEL FINDINGS AND RECOMMENDATIONS

	0-6 months	6-12 months	12-24 months	2-3 years	4-5 years
 Plain drinking water	not needed	0.5-1 cups/day	1-4 cups/day	1-4 cups/day	1.5-5 cups/day
 Plain, pasteurized milk	not recommended		2-3 cups/day whole milk	≤2 cups/day skim or low-fat milk	≤2.5 cups/day skim or low-fat milk
 100% juice	not recommended		≤0.5 cups/day	≤0.5 cups/day	≤0.5-0.75 cups/day
 Plant milks/Non-dairy beverages	not recommended		medical indication/dietary reasons only		
 Flavored milk	not recommended				
 Toddler milk	not recommended				
 Sugar-sweetened beverages (SSB)	not recommended				
 Beverages with low-calorie sweeteners (LCS)	not recommended				
 Caffeinated beverages	not recommended				

¹ Unsweetened, fortified milk alternatives may be a good choice if a child is allergic to dairy, lactose intolerant, or is in a family that has made specific dietary choices such as abstaining from animal products.

RESEARCH AND POLICY IMPLICATIONS

These recommendations are based on the best available science regarding the nutritional needs of infants and young children. Yet, there are still many unknowns about how young children's beverage habits relate to their overall diet quality and health. Thus, the expert panel made several suggestions for future research, such as:

- More long-term studies designed to look at how drinking different beverages during infancy and early childhood impacts diet quality, taste preferences, and health both in the short-term and as they age, and whether there are differences by demographic groups;
- Continued tracking of young children's beverage drinking habits, including newer types of beverages; and
- More studies to inform strategies to help young children cut down on drinks with added sugars.

In addition to providing consistent messages that can be used by health care providers, public health practitioners, and parents and caregivers to improve the beverage intake patterns of infants and young children, these recommendations are also relevant for local, state, national, and tribal policies, as they have the potential to inform:

- Beverage taxation policies;
- Decisions about what beverages to include in federal food and nutrition programs, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC);
- Regulations about what kinds of beverages can be marketed to young children and their parents; and
- Restaurant practices for kids meals, such as the default beverages offered.

About Healthy Eating Research

Healthy Eating Research (HER) is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by Duke University under the direction of Mary Story PhD, RD, program director, and Megan Lott, MPH, RDN, deputy director. HER supports research to identify, analyze, and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children and adolescents and their families, especially among lower-income and racial and ethnic minority population groups that are at highest risk for poor health and well-being and nutrition-related health disparities. For more information, visit www.healthyeatingresearch.org or follow HER on Twitter at [@HERResearch](https://twitter.com/HERResearch).

About the Robert Wood Johnson Foundation

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