

# Healthy Beverage Consumption

These recommendations on these pages were developed through collaboration of the Academy of Nutrition and Dietetics, the American Academy of Pediatric Dentistry, the American Academy of Pediatrics, and the American Heart Association under the leadership of Healthy Eating Research, a national program of the Robert Wood Johnson Foundation. The recommendations by age are intended for healthy children in the United States and do not address medical situations in which specific nutrition guidance is needed to manage a health condition.

The consensus statements on beverage consumption for ages 0-5 years and 5-18 years, as well as technical reports detailing the scientific evidence underlying the recommendations, are available at <https://healthyeatingresearch.org/>.

Summary of Recommendations for Healthy Beverage Consumption, Ages 0-5 Years*					
	0-6 months	6-12 months	12-24 months	2-3 years	4-5 years
Water <i>Plain drinking water</i>	No needed <i>Babies only need breast milk or infant formula to meet all of their nutrition and hydration needs.</i>	½-1 cup (4–8 fl oz) <i>Offer in a cup at meal times once solid food is introduced.</i>	1-4 cups (8–32 fl oz)		1½-5 cups (12–40 fl oz)
			Where an individual child falls within these ranges will depend on the amounts of other beverages during the day.		
Milk <i>Plain, pasteurized milk</i>	Not recommended		2-3 cups (16–24 fl oz) <i>whole milk</i>	Up to 2 cups (16 fl oz) <i>skim (fat-free) or low-fat (1%)</i>	Up to 2 cups (20 fl oz) <i>skim (fat-free) or low-fat (1%)</i>
100% Juice <i>Made from 100% fruit or vegetable juice</i>	Not recommended		Limit to ½ cup (4 fl oz)**		Limit to ½ -¾ cup (4–6 fl oz)**
			** Only a small amount of <b>100%</b> juice is recommended – you can add water to fill a bigger cup and make the juice less sweet. <i>It's best for children to get their fruit servings from fresh, canned, or frozen forms of fruit. If this is not possible, <b>100%</b> juice can be used to help children consume enough fruit.</i>		
Plant-based/non-dairy milk <i>Made from plant-based ingredients</i>	Not recommended <i>Examples: almond, rice, cashew, coconut</i>		Medical indication/dietary reasons only <i>Plant milks are nutritionally different from dairy milk. If your child is lactose intolerant, allergic to dairy milk, or if your family has chosen not to eat animal products, talk with your child's pediatrician or a registered dietitian to determine the best plant milk option.</i>		
Flavored Milk <i>Sweetened cow's milk</i>	Not recommended <i>Examples: chocolate, strawberry, vanilla</i>				
Toddler Formula <i>Milk drink marketed for 9 to 36 month olds, also known as “toddler milk”</i>	Not recommended <i>Examples: Enfagrow Toddler Transitions, Similac Go and Grow, Nido 1+</i>				
Sugar Drinks <i>Sweetened with added sugar</i>	Not recommended <i>Examples: regular soda, fruit-flavored drinks, sports drinks</i>				
Drinks with Low-Calorie Sweeteners <i>Beverages with artificial sweeteners (or “fake sugars”) added, often called diet or light drinks</i>	Not recommended <i>Examples: flavored water, soda, juice, or tea sweetened with Splenda®, Equal®, Sweet’N Low®, Stevia, etc.</i>				
Drinks with Caffeine	Not recommended <i>Examples: coffees, teas, energy drinks, some sodas</i>				

**Note:** All amounts listed are per day, unless otherwise noted; 1 cup = 8 fluid ounces.

\* The expert panel did not address breast milk or infant formula as recommendations in these areas vary by the infant's age, weight, and developmental milestones and are generally well understood and widely accepted.

## Summary of Recommendations for Healthy Beverage Consumption, Ages 5-18 Years

	5-8 years	9-13 years	14-18 years
<b>Total Hydration Needs*</b>	<b>40 fl oz of total beverages per day (~5 cups)</b>	<b>54-61 fl oz of total beverages per day (~6.75-7.6 cups)</b>	<b>61-88 fl oz of total beverages per day (~7.6-11 cups)</b>
<b>Plain Drinking Water**</b>	<b>16-40 fl oz per day (2-5 cups)</b>	<b>22-61 fl oz per day (2.75-7.6 cups)</b>	<b>29-88 fl oz per day (3.6-11 cups)</b>
<b>Milk</b>	up to 20 fl oz per day (2-5 cups eq/day)	up to 20 fl oz per day (3 cup eq/day)	up to 20 fl oz per day (3 cup eq/day)
<b>100% juice</b>	<4-6 fl oz per day (½-¾ cup/day)	<6-8 fl oz per day (¾ to 1 cup/day)	<8 fl oz per day (1 cup/day)
<b>Plant-Based Milk Alternatives</b>	Only recommended when medically indicated (eg, milk protein allergy) or to meet specific dietary patterns (eg, vegan). Choose alternatives that are nutritionally similar to milk, such as unsweetened, fortified soy milk. Avoid plant-based milk alternatives containing added sugar or non-sugar sweeteners		
<b>Sweetened Flavored milk</b>	Avoid or limit consumption due to the high amount of added sugars per serving		
<b>Sugar-Sweetened Beverages</b>	Not recommended		
<b>Beverages with Non-Sugar Sweeteners</b>	Not recommended		
<b>Beverages with Caffeine and Other Stimulants</b>	Not recommended		

\* Total hydration needs represent the total volume of fluids per day consumed as beverages; amounts are based on median intake to avoid dehydration and should not be considered maximums or minimums. Total hydration needs vary for each individual based on sex, age, and weight, and will vary day-to-day based on factors such as climate and physical activity.

\*\* Plain drinking water is the primary recommended beverage for meeting hydration needs.

## Plain Drinking Water and Total Hydration Needs

	5-8 years	9-13 years		14-18 years	
<b>Total Hydration Needs</b>	<b>40 fl oz per day</b> (5 cups or 1,183 mL) No difference by sex.	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>
		54 fl oz (6.75 cups or 1,597 mL)	61 fl oz (7.6 cups or 1,804 mL)	61 fl oz (7.6 cups or 1,804 mL)	88 fl oz (11 cups or 2,602 mL)
<b>Plain Drinking Water</b>	<b>16-40 fl oz per day</b> (2-5 cups or 473-1,183 mL) No difference by sex.	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>
		22-54 fl oz (2.75-6.75 cups or 651-1,597 mL)	29-61 fl oz (3.6-7.6 cups or 858-1,804 mL)	29-61 fl oz (3.6-7.6 cups or 858-1,804 mL)	56-88 fl oz (7-11 cups or 1,656-2,602 mL)

Plain drinking water is defined as potable water that is unsweetened, unflavored, and fluoridated. Fluoridated water is the preferred form of plain water given its substantial oral health benefits; however, not all communities or individuals have access to fluoridated water. In this case, the expert panel still recommends the consumption of plain water to meet daily water intake goals, and healthcare providers should discuss alternative sources of fluoride with patients and families. Ranges are determined using the quantities in total hydration needs minus the maximum recommended quantities of milk and 100% juice.

**Note about unit conversions:** 1 cup = 8 fluid ounces = 237 milliliters.