Example Scenarios of Daily Fluid Breakdowns by Age

There are two beverages recommended as part of a healthy diet for young children - plain, drinking water and plain, pasteurized milk. When counseling parents and caregivers on healthy beverage consumption, they may have questions about their child's total daily fluid needs for adequate hydration, and how much water and milk their child should consume based on the child's age and overall diet. This resource provides both recommended amounts and example scenarios of daily fluid breakdowns for children ages 1 to 5 years. For parents and caregivers of infants, 0-12 months, it is important to counsel on providing only breastmilk or infant formula, with the introduction of small amounts of plain water once solid food is introduced.

WATER

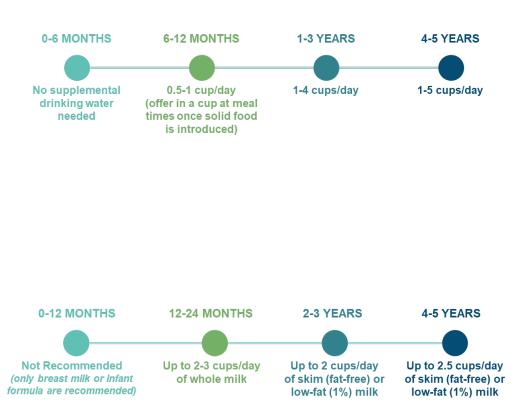
Water is essential for life and should be the go-to drink to quench children's thirst. The daily amount that children need can change based on the weather, how active they are, and the amount of fluids they get from other drinks as well as food (for example, foods like applesauce, soup, and oatmeal provide more water than others). While there is no single requirement of total fluid needed per person per day, there is a range of recommended water amounts for one-to five- year-olds designed to meet young children's nutrition and hydration needs. Here, the upper end of the range reflects the total water needed for children of this age per day if no other beverages are consumed, whereas the lower end of the range is the amount of water required if a child is drinking other beverages, such as milk and/or 100% juice. Several example scenarios follow to assist nutrition professionals in identifying average daily water needs for individuals based on these recommendations.

MILK

HEALTHY DRINKS.

HEALTHY KIDS

Plain cow's milk is a common, familiar beverage in U.S. diets, and its availability, affordability, and nutrient density make it a good choice for healthy, growing children. Milk is an important source of many nutrients that young children need for growth and development like protein, calcium, vitamins A, D, and B12, potassium, phosphorus, riboflavin, and niacin. Only plain, pasteurized milk should be consumed, as this reduces the risk of foodborne illness.





Healthy Eating Research

Daily Fluid Breakdown - Ages 1 to 3 Years

The Adequate Intake of total fluids recommended for 1- to 3-year-olds is 1.3 Liters, or approximately 5.5 cups (where 1 cup = 8 fluid ounces) per day. It is estimated that approximately 30% of this total fluid needs (e.g., ~0.4 L or 1.7 cups) is met via food consumption, leaving about 4 cups of fluid to be consumed as beverages.

Scenario 1:

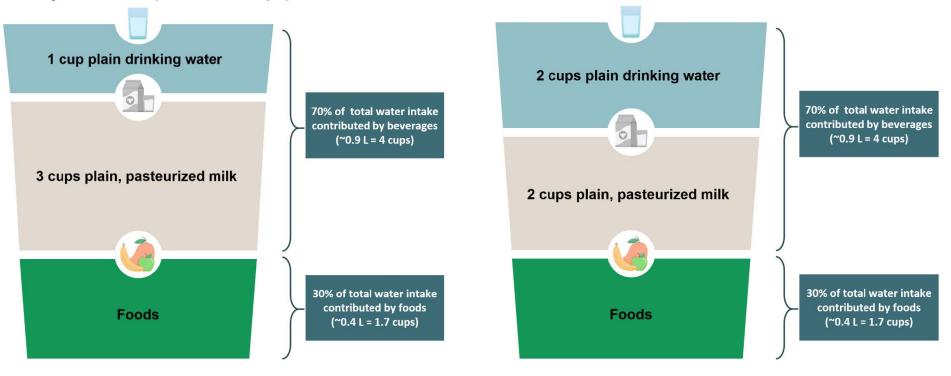
If you have a toddler who is 18 months old, and consumes the upper limit of milk recommended per day (3 cups whole milk), they would need to consume 1 cup of water to meet their total daily hydration needs. If less milk is consumed, the remaining fluid to be fulfilled by drinking water would increase. For example, if no milk is consumed, an 18-month-old would need to drink as much as 4 cups of water per day (however, this scenario is unlikely).

Scenario 2:

If you have a toddler who is 2 ½ years old, and consumes the upper limit of milk recommended per day (2 cups skim or low-fat milk), they would need to consume 2 cups of water to meet their total daily hydration needs. If less milk is consumed, the remaining fluid to be fulfilled by drinking water would increase. For example, if no milk is consumed, a 2 ½ year-old would need to consume as much as 4 cups of water per day.

1.3 L/day total water (44 fl oz/5.5 cups)*

1.3 L/day total water (44 fl oz/5.5 cups)*



*Conversion factors: 1 L = 33.8 fluid oz; 1 L = 1.06 qt; 1 cup = 8 fluid oz

Daily Fluid Breakdown - Ages 4 to 5 Years

The Adequate Intake of total fluids recommended for 4- to 5-year-olds is 1.7 Liters, or approximately 7 cups (where 1 cup = 8 fluid ounces) per day. It is estimated that approximately 30% of this total fluid needs (e.g., ~0.5 L or 2 cups) will be met via food consumption, leaving about 5 cups of fluid to be consumed as beverages.

Scenario 3:

If you have a 4-year-old who consumes the upper limit of milk recommended per day (2.5 cups skim or low-fat milk), they would need to consume 2.5 cups of water to meet their total daily hydration needs. If less milk is consumed, the remaining fluid to be fulfilled by drinking water would increase. For example, if no milk is consumed, a 4-year-old would need to drink as much as 5 cups of water per day.

Scenario 4:

Up to 4 ounces of 100% fruit or vegetable juice may be consumed per day as part of a healthy diet. This should also be counted towards total daily hydration. Thus, if you have a 4-year-old who consumes 2 cups per day of milk and 4 ounces per day of 100% fruit juice, they would need to consume 2.5 cups per day of water to meet daily hydration needs.

1.7 L/day total water (57.5 fl oz/~7 cups)*

2.5 cups plain drinking water 2.5 cups plain drinking water 70% of total water intake 70% of total water intake contributed by beverages contributed by beverages 0 0 (~1.2 L = 5 cups) (~1.2 L = 5 cups)2 cups plain, pasteurized milk 2.5 cups plain, pasteurized milk 0.5 cups 100% Juice 30% of total water intake 30% of total water intake contributed by foods contributed by foods Foods Foods (~0.5 L = 2 cups) (~0.5 L = 2 cups)

1.7 L/day total water (57.5 fl oz/~7 cups)*

*Conversion factors: 1 L = 33.8 fluid oz; 1 L = 1.06 qt; 1 cup = 8 fluid oz