





Hydration Ring



Adequate Intake (AI) of water

Male (19+)

Female (19+)

in Liters per day (L/d)

3.7 Liters

2.7 Liters

Dietary Reference Intakes : Electrolytes and Water

Nutrient	Function	Life Stage Group	AI	UL ^a	Selected Food Sources	Adverse Effects of Excessive Consumption	Special Considerations
Water	Maintains homeostasis in the body and allows for transport of nutrients to cells and removal and excretion of waste products of metabolism.	Infants	(L/d)	No UL.	All beverages, including water, as well as moisture in foods (high moisture foods include watermelon, meats, soups, etc.).	No UL because normally functioning kidneys can handle more than 0.7 L (24 oz) of fluid per hour; symptoms of water intoxication include hyponatremia which can result in heart failure and rhabdomyolysis (skeletal muscle tissue injury) which can lead to kidney failure.	Recommended intakes for water are based on median intakes of generally healthy individuals who are adequately hydrated; individuals can be adequately hydrated at levels below as well as above the AIs provided. The AIs provided are for total water in temperate climates. All sources can contribute to total water needs: beverages (including tea, coffee, juices, sodas, and drinking water) and moisture found in foods. Moisture in food accounts for about 20% of total water intake. Thirst and consumption of beverages at meals are adequate to maintain hydration.
		0–6 mo	0.7				
		7–12 mo	0.8				
		Children					
		1–3 y	1.3				
		4–8 y	1.7				
		Males					
		9–13 y	2.4				
		14–18 y	3.3				
		19–30 y	3.7				
		31–50 y	3.7				
		50–70 y	3.7				
		> 70 y	3.7				
		Females					
		9–13 y	2.1				
14–18 y	2.3						
19–30 y	2.7						
31–50 y	2.7						
50–70 y	2.7						
> 70 y	2.7						
Pregnancy							
14–18 y	3.0						
19–50 y	3.0						
Lactation							
14–18 y	3.8						
19–50 y	3.8						



Percentage of fluid intake from beverages

Male (19+)

Female (19+)

81 %

81 %

Median *Total* Water Intake in the United States

Life Stage Group ^a	Percent from Beverages ^b	Percent from Foods
Both sexes, 0–6 mo	100	0
Both sexes, 7–12 mo	74	26
Both sexes, 1–3 y	71	29
Both sexes, 4–8 y	70	30
M, 9–13 y	76	24
M, 14–18 y	80	20
M, 19–30 y	81	19
M, 31–50 y	81	19
M, 51–70 y	81	19
M, > 70 y	81	19
F, 9–13 y	75	25
F, 14–18 y	80	20
F, 19–30 y	81	19
F, 31–50 y	81	19
F, 51–70 y	81	19
F, > 70 y	81	19
Pregnant	77	22
Lactating	82	18

Recommended Volume



Volume of recommended fluid intake per day	Male (19+) 3 L , 100 oz.	Female (19+) 2 L, 70 oz.
Percentage of fluid intake from beverages	Male (19+) 81 %	Female (19+) 81 %
Adequate Intake (AI) of water in Liters per day (L/d)	Male (19+) 3.7 Liters	Female (19+) 2.7 Liters

