

Dietary Reference Intakes (DRI)

The Dietary Reference Intakes (DRI) include two sets of values that serve as goals for nutrient intake—Recommended Dietary Allowances (RDA) and Adequate Intakes (AI). The RDA reflect the average daily amount of a nutrient considered adequate to meet the needs of most healthy people. If there is insufficient evidence to determine an RDA, an AI is set. AI are more tentative than RDA, but both may be used as goals for nutrient intakes.

In addition to the values that serve as goals for nutrient intakes (presented in the tables on these two pages), the DRI include a set of values called Tolerable Upper Intake Levels (UL). The UL represent the maximum amount of a nutrient that appears safe for most healthy people to consume on a regular basis. Turn the page for a listing of the UL for selected vitamins and minerals.

Estimated Energy Requirements (EER), Recommended Dietary Allowances (RDA), and Adequate Intakes (AI) for Water, Energy, and the Energy Nutrients

Age(yr)	Reference BMI (kg/m ²)	Reference height, cm (in)	Reference weight, kg (lb)	Water ^a AI (L/day)	Energy EER ^b (kcal/day)	Carbohydrate RDA (g/day)	Total fiber AI (g/day)	Total fat AI (g/day)	Linoleic acid AI (g/day)	Linolenic acid ^c AI (g/day)	Protein RDA (g/day) ^d	Protein RDA (g/kg/day)
Males												
0-0.5	—	62 (24)	6 (13)	0.7 ^e	570	60	—	31	4.4	0.5	9.1	1.52
0.5-1	—	71 (28)	9 (20)	0.8 ^f	743	95	—	30	4.6	0.5	13.5	1.5
1-3 ^g	—	86 (34)	12 (27)	1.3	1046	130	19	—	7	0.7	13	1.1
4-8 ^g	15.3	115 (45)	20 (44)	1.7	1742	130	25	—	10	0.9	19	0.95
9-13	17.2	144 (57)	36 (79)	2.4	2279	130	31	—	12	1.2	34	0.95
14-18	20.5	174 (68)	61 (134)	3.3	3152 ^h	130	38	—	16	1.6	52	0.85
19-30	22.5	177 (70)	70 (154)	3.7	3067 ^h	130	38	—	17	1.6	56	0.8
31-50				3.7	3067 ^h	130	38	—	17	1.6	56	0.8
>50				3.7	3067 ^h	130	30	—	14	1.6	56	0.8
Females												
0-0.5	—	62 (24)	6 (13)	0.7 ^e	520	60	—	31	4.4	0.5	9.1	1.52
0.5-1	—	71 (28)	9 (20)	0.8 ^f	676	95	—	30	4.6	0.5	13.5	1.5
1-3 ^g	—	86 (34)	12 (27)	1.3	992	130	19	—	7	0.7	13	1.1
4-8 ^g	15.3	115 (45)	20 (44)	1.7	1642	130	25	—	10	0.9	19	0.95
9-13	17.4	144 (57)	37 (81)	2.1	2071	130	26	—	10	1.0	34	0.95
14-18	20.4	163 (64)	54 (119)	2.3	2368	130	26	—	11	1.1	46	0.85
19-30	21.5	163 (64)	57 (126)	2.7	2403 ⁱ	130	25	—	12	1.1	46	0.8
31-50				2.7	2403 ⁱ	130	21	—	12	1.1	46	0.8
>50				2.7	2403 ⁱ	130	21	—	11	1.1	46	0.8
Pregnancy												
<i>1st trimester</i>				3.0	+0	175	28	—	13	1.4	+25	1.1
<i>2nd trimester</i>				3.0	+340	175	28	—	13	1.4	+25	1.1
<i>3rd trimester</i>				3.0	+452	175	28	—	13	1.4	+25	1.1
Lactation												
<i>1st 6 months</i>				3.8	+330	210	29	—	13	1.3	+25	1.1
<i>2nd 6 months</i>				3.8	+400	210	29	—	13	1.3	+25	1.1

NOTE: For all nutrients, values for infants are AI. Dashes indicate that values have not been determined.

^aThe water AI includes drinking water, water in beverages, and water in foods; in general, drinking water and other beverages contribute about 70 to 80 percent, and foods, the remainder. Conversion factors: 1 L = 33.8 fluid oz; 1 L = 1.06 qt; 1 cup = 8 fluid oz.

^bThe Estimated Energy Requirement (EER) represents the average dietary energy intake that will maintain energy balance in a healthy person of a given gender, age, weight, height, and physical activity level. The values listed are based on an "active" person at the reference height and weight and at the midpoint ages for each group until age 19.

^cThe linolenic acid referred to in this table and text is the omega-3 fatty acid known as alpha-linolenic acid.

^dThe values listed are based on reference body weights.

^eAssumed to be from human milk.

^fAssumed to be from human milk and complementary foods and beverages. This includes approximately 0.6 L (~3 cups) as total fluid including formula, juices, and drinking water.

^gFor energy, the age groups for young children are 1-2 years and 3-8 years.

^hFor males, subtract 10 kcalories per day for each year of age above 19.

ⁱFor females, subtract 7 kcalories per day for each year of age above 19.

SOURCE: Adapted from the *Dietary Reference Intakes* series, National Academies Press. Copyright 1997, 1998, 2000, 2001, 2002, 2004, by the National Academies of Sciences.