

2015-2020 Dietary Guidelines

Appendix 2. Estimated Calorie Needs per Day, by Age, Sex, and Physical Activity Level

The total number of calories a person needs each day varies depending on a number of factors, including the person’s age, sex, height, weight, and level of physical activity. In addition, a need to lose, maintain, or gain weight and other factors affect how many calories should be consumed. Estimated amounts of calories needed to maintain calorie balance for various age and sex groups at three different levels of physical activity are provided in [Table A2-1](#). These estimates are based on the Estimated Energy Requirements (EER) equations, using reference heights (average) and reference weights (healthy) for each age-sex group. For children and adolescents, reference height and weight vary. For adults, the reference man is 5 feet 10 inches tall and weighs 154 pounds. The reference woman is 5 feet 4 inches tall and weighs 126 pounds.

Estimates range from 1,600 to 2,400 calories per day for adult women and 2,000 to 3,000 calories per day for adult men. Within each age and sex category, the low end of the range is for sedentary individuals; the high end of the range is for active individuals. Due to reductions in basal metabolic rate that occur with aging, calorie needs generally decrease for adults as they age. Estimated needs for young children range from 1,000 to 2,000 calories per day, and the range for older children and adolescents varies substantially from 1,400 to 3,200 calories per day, with boys generally having higher calorie needs than girls. These are only estimates, and approximations of individual calorie needs can be aided with online tools such as those available at www.supertracker.usda.gov (<https://www.supertracker.usda.gov/>).

Table A2-1.
Estimated Calorie Needs per Day, by Age, Sex, and Physical Activity Level

| MALES | | | | FEMALES ^[d] | | | |
|-------|--------------------------|----------------------------------|-----------------------|------------------------|--------------------------|----------------------------------|-----------------------|
| AGE | Sedentary ^[a] | Moderately active ^[b] | Active ^[c] | AGE | Sedentary ^[a] | Moderately active ^[b] | Active ^[c] |
| 2 | 1,000 | 1,000 | 1,000 | 2 | 1,000 | 1,000 | 1,000 |
| 3 | 1,000 | 1,400 | 1,400 | 3 | 1,000 | 1,200 | 1,400 |
| 4 | 1,200 | 1,400 | 1,600 | 4 | 1,200 | 1,400 | 1,400 |
| 5 | 1,200 | 1,400 | 1,600 | 5 | 1,200 | 1,400 | 1,600 |
| 6 | 1,400 | 1,600 | 1,800 | 6 | 1,200 | 1,400 | 1,600 |
| 7 | 1,400 | 1,600 | 1,800 | 7 | 1,200 | 1,600 | 1,800 |
| 8 | 1,400 | 1,600 | 2,000 | 8 | 1,400 | 1,600 | 1,800 |
| 9 | 1,600 | 1,800 | 2,000 | 9 | 1,400 | 1,600 | 1,800 |
| 10 | 1,600 | 1,800 | 2,200 | 10 | 1,400 | 1,800 | 2,000 |
| 11 | 1,800 | 2,000 | 2,200 | 11 | 1,600 | 1,800 | 2,000 |
| 12 | 1,800 | 2,200 | 2,400 | 12 | 1,600 | 2,000 | 2,200 |
| 13 | 2,000 | 2,200 | 2,600 | 13 | 1,600 | 2,000 | 2,200 |
| 14 | 2,000 | 2,400 | 2,800 | 14 | 1,800 | 2,000 | 2,400 |
| 15 | 2,200 | 2,600 | 3,000 | 15 | 1,800 | 2,000 | 2,400 |
| 16 | 2,400 | 2,800 | 3,200 | 16 | 1,800 | 2,000 | 2,400 |
| 17 | 2,400 | 2,800 | 3,200 | 17 | 1,800 | 2,000 | 2,400 |
| 18 | 2,400 | 2,800 | 3,200 | 18 | 1,800 | 2,000 | 2,400 |
| 19-20 | 2,600 | 2,800 | 3,000 | 19-20 | 2,000 | 2,200 | 2,400 |
| 21-25 | 2,400 | 2,800 | 3,000 | 21-25 | 2,000 | 2,200 | 2,400 |
| 26-30 | 2,400 | 2,600 | 3,000 | 26-30 | 1,800 | 2,000 | 2,400 |

| AGE | Sedentary^[a] | Moderately active^[b] | Active^[c] | AGE | Sedentary^[a] | Moderately active^[b] | Active^[c] |
|------------|--------------------------------|----------------------------------------|-----------------------------|------------|--------------------------------|----------------------------------------|-----------------------------|
| 31-35 | 2,400 | 2,600 | 3,000 | 31-35 | 1,800 | 2,000 | 2,200 |
| 36-40 | 2,400 | 2,600 | 2,800 | 36-40 | 1,800 | 2,000 | 2,200 |
| 41-45 | 2,200 | 2,600 | 2,800 | 41-45 | 1,800 | 2,000 | 2,200 |
| 46-50 | 2,200 | 2,400 | 2,800 | 46-50 | 1,800 | 2,000 | 2,200 |
| 51-55 | 2,200 | 2,400 | 2,800 | 51-55 | 1,600 | 1,800 | 2,200 |
| 56-60 | 2,200 | 2,400 | 2,600 | 56-60 | 1,600 | 1,800 | 2,200 |
| 61-65 | 2,000 | 2,400 | 2,600 | 61-65 | 1,600 | 1,800 | 2,000 |
| 66-70 | 2,000 | 2,200 | 2,600 | 66-70 | 1,600 | 1,800 | 2,000 |
| 71-75 | 2,000 | 2,200 | 2,600 | 71-75 | 1,600 | 1,800 | 2,000 |
| 76 and up | 2,000 | 2,200 | 2,400 | 76 and up | 1,600 | 1,800 | 2,000 |

Notes

[a] Sedentary means a lifestyle that includes only the physical activity of independent living.

[b] Moderately Active means a lifestyle that includes physical activity equivalent to walking about 1.5 to 3 miles per day at 3 to 4 miles per hour, in addition to the activities of independent living.

[c] Active means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the activities of independent living.

[d] Estimates for females do not include women who are pregnant or breastfeeding.

Source: Institute of Medicine. Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. Washington (DC): The National Academies Press; 2002.