

# Estimated Energy Requirements

Men:  $[662 - (9.53 \times \text{age})] + \text{PA} \times [(15.91 \times \text{weight}) + (539.6 \times \text{height})]$

Women:  $[354 - (6.91 \times \text{age})] + \text{PA} \times [(9.36 \times \text{weight}) + (726 \times \text{height})]$

## Additional Info. for Equation Above:

- Age in years
- Weight in kilograms  
*To calculate this, take: lbs/2.2*
- Height in meters  
*To calculate this, take: total inches/39.37*
- Do calculations in ( ) first; then[ ]  
Do multiplication before addition
- Physical Activity (PA) from PA Chart →

## Physical Activity (PA) Factors for EER Equations

|             | Men  | Women | Physical Activity  |
|-------------|------|-------|--|
| Sedentary   | 1.0  | 1.0   | Typical daily living activities  |
| Low Active  | 1.11 | 1.12  | Plus 30-60 min moderate activity   |
| Active      | 1.25 | 1.27  | Plus ≥ 60 min moderate activity  |
| Very Active | 1.48 | 1.45  | Plus ≥ 60 min moderate activity and 60 min vigorous or 120 min moderate activity |

NOTE: Moderate Activity is Equivalent to walking at 3 to 4 ½ mph.

# Recommended Intakes of Macronutrients

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

| Age (yr)         | Water <sup>a</sup><br>AI (L/day) | Carbohydrate<br>RDA (g/day) | Total Fiber<br>AI (g/day) | Total Fat<br>AI (g/day) | Linoleic Acid<br>AI (g/day) | Linolenic Acid <sup>c</sup><br>AI (g/day) | Protein<br>RDA (g/day) <sup>d</sup> | Protein<br>RDA (g/kg/day) |
|------------------|----------------------------------|-----------------------------|---------------------------|-------------------------|-----------------------------|---|-------------------------------------|---------------------------|
| <b>Males</b>     |                                  |                             |                           |                         |                             |   |                                     |                           |
| 0–0.5            | 0.7 <sup>e</sup>                 | 60                          | —                         | 31                      | 4.4                         | 0.5                                       | 9.1                                 | 1.52                      |
| 0.5–1            | 0.8 <sup>f</sup>                 | 95                          | —                         | 30                      | 4.6                         | 0.5                                       | 11                                  | 1.20                      |
| 1–3 <sup>g</sup> | 1.3                              | 130                         | 19                        | —                       | 7                           | 0.7                                       | 13                                  | 1.05                      |
| 4–8 <sup>g</sup> | 1.7                              | 130                         | 25                        | —                       | 10                          | 0.9                                       | 19                                  | 0.95                      |
| 9–13             | 2.4                              | 130                         | 31                        | —                       | 12                          | 1.2                                       | 34                                  | 0.95                      |
| 14–18            | 3.3                              | 130                         | 38                        | —                       | 16                          | 1.6                                       | 52                                  | 0.85                      |
| 19–30            | 3.7                              | 130                         | 38                        | —                       | 17                          | 1.6                                       | 56                                  | 0.80                      |
| 31–50            | 3.7                              | 130                         | 38                        | —                       | 17                          | 1.6                                       | 56                                  | 0.80                      |
| >50              | 3.7                              | 130                         | 30                        | —                       | 14                          | 1.6                                       | 56                                  | 0.80                      |
| <b>Females</b>   |                                  |                             |                           |                         |                             |   |                                     |                           |
| 0–0.5            | 0.7 <sup>e</sup>                 | 60                          | —                         | 31                      | 4.4                         | 0.5                                       | 9.1                                 | 1.52                      |
| 0.5–1            | 0.8 <sup>f</sup>                 | 95                          | —                         | 30                      | 4.6                         | 0.5                                       | 11                                  | 1.20                      |
| 1–3 <sup>g</sup> | 1.3                              | 130                         | 19                        | —                       | 7                           | 0.7                                       | 13                                  | 1.05                      |
| 4–8 <sup>g</sup> | 1.7                              | 130                         | 25                        | —                       | 10                          | 0.9                                       | 19                                  | 0.95                      |
| 9–13             | 2.1                              | 130                         | 26                        | —                       | 10                          | 1.0                                       | 34                                  | 0.95                      |
| 14–18            | 2.3                              | 130                         | 26                        | —                       | 11                          | 1.1                                       | 46                                  | 0.85                      |
| 19–30            | 2.7                              | 130                         | 25                        | —                       | 12                          | 1.1                                       | 46                                  | 0.80                      |
| 31–50            | 2.7                              | 130                         | 25                        | —                       | 12                          | 1.1                                       | 46                                  | 0.80                      |
| >50              | 2.7                              | 130                         | 21                        | —                       | 11                          | 1.1                                       | 46                                  | 0.80                      |
| <b>Pregnancy</b> |                                  |                             |                           |                         |                             |   |                                     |                           |
| 1st trimester    | 3.0                              | 175                         | 28                        | —                       | 13                          | 1.4                                       | 46                                  | 0.80                      |
| 2nd trimester    | 3.0                              | 175                         | 28                        | —                       | 13                          | 1.4                                       | 71                                  | 1.10                      |
| 3rd trimester    | 3.0                              | 175                         | 28                        | —                       | 13                          | 1.4                                       | 71                                  | 1.10                      |
| <b>Lactation</b> |                                  |                             |                           |                         |                             |   |                                     |                           |
| 1st 6 months     | 3.8                              | 210                         | 29                        | —                       | 13                          | 1.3                                       | 71                                  | 1.30                      |
| 2nd 6 months     | 3.8                              | 210                         | 29                        | —                       | 13                          | 1.3                                       | 71                                  | 1.30                      |

## Acceptable Macronutrient Distribution Ranges (AMDR)

- 45-65% daily kcals from CHO
- 20-35% daily kcals from fat
- 10-35% daily kcals from protein

## Upper Limits (UL)

- No UL for CHO (g)
- No UL for Fat (g)
- No UL for Protein (g)
- No UL for Fiber (g)



# Additional Information Not on Charts

- Recommendations regarding Specific CHO:

- ✓ Fiber: 25 g/day (adult women); 38 g/day (adult men)
- ✓ Added Sugar: < 10% of daily intake
- ✓ Total Sugar: No recommendations

- Recommendations regarding Specific Fats:

- ✓ < 10% from saturated fat
- ✓ As little *trans* fat as possible (Goal: 0 grams)

# Recommended Intakes of Vitamins

**Recommended Dietary Allowances (RDA) and Adequate Intakes (AI) for Vitamins**

| Age (yr)         | Thiamin<br>RDA (mg/day) | Riboflavin<br>RDA (mg/day) | Niacin<br>RDA (mg/day) <sup>a</sup> | Biotin<br>AI (µg/day) | Pantothenic<br>acid<br>AI (mg/day) | Vitamin B <sub>6</sub><br>RDA (mg/day) | Folate<br>RDA (µg/day) <sup>b</sup> | Vitamin B <sub>12</sub><br>RDA (µg/day) | Choline<br>AI (mg/day) | Vitamin C<br>RDA (mg/day) | Vitamin A<br>RDA (µg/day) <sup>c</sup> | Vitamin D<br>RDA (µg/day) <sup>d</sup> | Vitamin E<br>RDA (mg/day) <sup>e</sup> | Vitamin K<br>AI (µg/day) |
|------------------|-------------------------|----------------------------|-------------------------------------|-----------------------|------------------------------------|--|-------------------------------------|---|------------------------|---------------------------|--|--|--|--------------------------|
| <b>Infants</b>   |                         |                            |                                     |                       |                                    |  |                                     |   |                        |                           |  |  |  |                          |
| 0–0.5            | 0.2                     | 0.3                        | 2                                   | 5                     | 1.7                                | 0.1                                    | 65                                  | 0.4                                     | 125                    | 40                        | 400                                    | 10                                     | 4                                      | 2.0                      |
| 0.5–1            | 0.3                     | 0.4                        | 4                                   | 6                     | 1.8                                | 0.3                                    | 80                                  | 0.5                                     | 150                    | 50                        | 500                                    | 10                                     | 5                                      | 2.5                      |
| <b>Children</b>  |                         |                            |                                     |                       |                                    |  |                                     |   |                        |                           |  |  |  |                          |
| 1–3              | 0.5                     | 0.5                        | 6                                   | 8                     | 2                                  | 0.5                                    | 150                                 | 0.9                                     | 200                    | 15                        | 300                                    | 15                                     | 6                                      | 30                       |
| 4–8              | 0.6                     | 0.6                        | 8                                   | 12                    | 3                                  | 0.6                                    | 200                                 | 1.2                                     | 250                    | 25                        | 400                                    | 15                                     | 7                                      | 55                       |
| <b>Males</b>     |                         |                            |                                     |                       |                                    |  |                                     |   |                        |                           |  |  |  |                          |
| 9–13             | 0.9                     | 0.9                        | 12                                  | 20                    | 4                                  | 1.0                                    | 300                                 | 1.8                                     | 375                    | 45                        | 600                                    | 15                                     | 11                                     | 60                       |
| 14–18            | 1.2                     | 1.3                        | 16                                  | 25                    | 5                                  | 1.3                                    | 400                                 | 2.4                                     | 550                    | 75                        | 900                                    | 15                                     | 15                                     | 75                       |
| 19–30            | 1.2                     | 1.3                        | 16                                  | 30                    | 5                                  | 1.3                                    | 400                                 | 2.4                                     | 550                    | 90                        | 900                                    | 15                                     | 15                                     | 120                      |
| 31–50            | 1.2                     | 1.3                        | 16                                  | 30                    | 5                                  | 1.3                                    | 400                                 | 2.4                                     | 550                    | 90                        | 900                                    | 15                                     | 15                                     | 120                      |
| 51–70            | 1.2                     | 1.3                        | 16                                  | 30                    | 5                                  | 1.7                                    | 400                                 | 2.4                                     | 550                    | 90                        | 900                                    | 15                                     | 15                                     | 120                      |
| >70              | 1.2                     | 1.3                        | 16                                  | 30                    | 5                                  | 1.7                                    | 400                                 | 2.4                                     | 550                    | 90                        | 900                                    | 20                                     | 15                                     | 120                      |
| <b>Females</b>   |                         |                            |                                     |                       |                                    |  |                                     |   |                        |                           |  |  |  |                          |
| 9–13             | 0.9                     | 0.9                        | 12                                  | 20                    | 4                                  | 1.0                                    | 300                                 | 1.8                                     | 375                    | 45                        | 600                                    | 15                                     | 11                                     | 60                       |
| 14–18            | 1.0                     | 1.0                        | 14                                  | 25                    | 5                                  | 1.2                                    | 400                                 | 2.4                                     | 400                    | 65                        | 700                                    | 15                                     | 15                                     | 75                       |
| 19–30            | 1.1                     | 1.1                        | 14                                  | 30                    | 5                                  | 1.3                                    | 400                                 | 2.4                                     | 425                    | 75                        | 700                                    | 15                                     | 15                                     | 90                       |
| 31–50            | 1.1                     | 1.1                        | 14                                  | 30                    | 5                                  | 1.3                                    | 400                                 | 2.4                                     | 425                    | 75                        | 700                                    | 15                                     | 15                                     | 90                       |
| 51–70            | 1.1                     | 1.1                        | 14                                  | 30                    | 5                                  | 1.5                                    | 400                                 | 2.4                                     | 425                    | 75                        | 700                                    | 15                                     | 15                                     | 90                       |
| >70              | 1.1                     | 1.1                        | 14                                  | 30                    | 5                                  | 1.5                                    | 400                                 | 2.4                                     | 425                    | 75                        | 700                                    | 20                                     | 15                                     | 90                       |
| <b>Pregnancy</b> |                         |                            |                                     |                       |                                    |  |                                     |   |                        |                           |  |  |  |                          |
| ≤18              | 1.4                     | 1.4                        | 18                                  | 30                    | 6                                  | 1.9                                    | 600                                 | 2.6                                     | 450                    | 80                        | 750                                    | 15                                     | 15                                     | 75                       |
| 19–30            | 1.4                     | 1.4                        | 18                                  | 30                    | 6                                  | 1.9                                    | 600                                 | 2.6                                     | 450                    | 85                        | 770                                    | 15                                     | 15                                     | 90                       |
| 31–50            | 1.4                     | 1.4                        | 18                                  | 30                    | 6                                  | 1.9                                    | 600                                 | 2.6                                     | 450                    | 85                        | 770                                    | 15                                     | 15                                     | 90                       |
| <b>Lactation</b> |                         |                            |                                     |                       |                                    |  |                                     |   |                        |                           |  |  |  |                          |
| ≤18              | 1.4                     | 1.6                        | 17                                  | 35                    | 7                                  | 2.0                                    | 500                                 | 2.8                                     | 550                    | 115                       | 1200                                   | 15                                     | 19                                     | 75                       |
| 19–30            | 1.4                     | 1.6                        | 17                                  | 35                    | 7                                  | 2.0                                    | 500                                 | 2.8                                     | 550                    | 120                       | 1300                                   | 15                                     | 19                                     | 90                       |
| 31–50            | 1.4                     | 1.6                        | 17                                  | 35                    | 7                                  | 2.0                                    | 500                                 | 2.8                                     | 550                    | 120                       | 1300                                   | 15                                     | 19                                     | 90                       |

NOTE: For all nutrients, values for infants are AI. The glossary on the inside back cover defines units of nutrient measure.

<sup>a</sup>Niacin recommendations are expressed as niacin equivalents (NE), except for recommendations for infants younger than 6 months, which are expressed as preformed niacin.

<sup>b</sup>Folate recommendations are expressed as dietary folate equivalents (DFE).

<sup>c</sup>Vitamin A recommendations are expressed as retinol activity equivalents (RAE).

<sup>d</sup>Vitamin D recommendations are expressed as cholecalciferol and assume minimal sunlight.

<sup>e</sup>Vitamin E recommendations are expressed as α-tocopherol.

**Tolerable Upper Intake Levels (UL) for Vitamins**

| Age (yr)           | Niacin<br>(mg/day) <sup>a</sup> | Vitamin B <sub>6</sub><br>(mg/day) | Folate<br>(µg/day) <sup>a</sup> | Choline<br>(mg/day) | Vitamin C<br>(mg/day) | Vitamin A<br>(µg/day) <sup>b</sup> | Vitamin D<br>(µg/day) | Vitamin E<br>(mg/day) <sup>c</sup> |
|--------------------|---------------------------------|------------------------------------|---------------------------------|---------------------|-----------------------|------------------------------------|-----------------------|------------------------------------|
| <b>Infants</b>     |                                 |                                    |                                 |                     |                       |                                    |                       |                                    |
| 0–0.5              | —                               | —                                  | —                               | —                   | —                     | 600                                | 25                    | —                                  |
| 0.5–1              | —                               | —                                  | —                               | —                   | —                     | 600                                | 38                    | —                                  |
| <b>Children</b>    |                                 |                                    |                                 |                     |                       |                                    |                       |                                    |
| 1–3                | 10                              | 30                                 | 300                             | 1000                | 400                   | 600                                | 63                    | 200                                |
| 4–8                | 15                              | 40                                 | 400                             | 1000                | 650                   | 900                                | 75                    | 300                                |
| 9–13               | 20                              | 60                                 | 600                             | 2000                | 1200                  | 1700                               | 100                   | 600                                |
| <b>Adolescents</b> |                                 |                                    |                                 |                     |                       |                                    |                       |                                    |
| 14–18              | 30                              | 80                                 | 800                             | 3000                | 1800                  | 2800                               | 100                   | 800                                |
| <b>Adults</b>      |                                 |                                    |                                 |                     |                       |                                    |                       |                                    |
| 19–70              | 35                              | 100                                | 1000                            | 3500                | 2000                  | 3000                               | 100                   | 1000                               |
| >70                | 35                              | 100                                | 1000                            | 3500                | 2000                  | 3000                               | 100                   | 1000                               |
| <b>Pregnancy</b>   |                                 |                                    |                                 |                     |                       |                                    |                       |                                    |
| ≤18                | 30                              | 80                                 | 800                             | 3000                | 1800                  | 2800                               | 100                   | 800                                |
| 19–50              | 35                              | 100                                | 1000                            | 3500                | 2000                  | 3000                               | 100                   | 1000                               |
| <b>Lactation</b>   |                                 |                                    |                                 |                     |                       |                                    |                       |                                    |
| ≤18                | 30                              | 80                                 | 800                             | 3000                | 1800                  | 2800                               | 100                   | 800                                |
| 19–50              | 35                              | 100                                | 1000                            | 3500                | 2000                  | 3000                               | 100                   | 1000                               |

<sup>a</sup>The UL for niacin and folate apply to synthetic forms obtained from supplements, fortified foods, or a combination of the two.

<sup>b</sup>The UL for vitamin A applies to the preformed vitamin only.

<sup>c</sup>The UL for vitamin E applies to any form of supplemental α-tocopherol, fortified foods, or a combination of the two.



# Recommended Intakes of Minerals

**Recommended Dietary Allowances (RDA) and Adequate Intakes (AI) for Minerals**

| Age (yr)         | Sodium<br>AI (mg/day) | Chloride<br>AI (mg/day) | Potassium<br>AI (mg/day) | Calcium<br>RDA (mg/day) | Phosphorus<br>RDA (mg/day) | Magnesium<br>RDA (mg/day) | Iron<br>RDA (mg/day) | Zinc<br>RDA (mg/day) | Iodine<br>RDA (µg/day) | Selenium<br>RDA (µg/day) | Copper<br>RDA (µg/day) | Manganese<br>AI (mg/day) | Fluoride<br>AI (mg/day) | Chromium<br>AI (µg/day) | Molybdenum<br>RDA (µg/day) |
|------------------|-----------------------|-------------------------|--------------------------|-------------------------|----------------------------|---------------------------|----------------------|----------------------|------------------------|--------------------------|------------------------|--------------------------|-------------------------|-------------------------|----------------------------|
| <b>Infants</b>   |                       |                         |                          |                         |                            |                           |                      |                      |                        |                          |                        |                          |                         |                         |                            |
| 0–0.5            | 120                   | 180                     | 400                      | 200                     | 100                        | 30                        | 0.27                 | 2                    | 110                    | 15                       | 200                    | 0.003                    | 0.01                    | 0.2                     | 2                          |
| 0.5–1            | 370                   | 570                     | 860                      | 260                     | 275                        | 75                        | 11                   | 3                    | 130                    | 20                       | 220                    | 0.6                      | 0.5                     | 5.5                     | 3                          |
| <b>Children</b>  |                       |                         |                          |                         |                            |                           |                      |                      |                        |                          |                        |                          |                         |                         |                            |
| 1–3              | 1000                  | 1500                    | 2000                     | 700                     | 460                        | 80                        | 7                    | 3                    | 90                     | 20                       | 340                    | 1.2                      | 0.7                     | 11                      | 17                         |
| 4–8              | 1200                  | 1900                    | 2300                     | 1000                    | 500                        | 130                       | 10                   | 5                    | 90                     | 30                       | 440                    | 1.5                      | 1.0                     | 15                      | 22                         |
| <b>Males</b>     |                       |                         |                          |                         |                            |                           |                      |                      |                        |                          |                        |                          |                         |                         |                            |
| 9–13             | 1500                  | 2300                    | 2500                     | 1300                    | 1250                       | 240                       | 8                    | 8                    | 120                    | 40                       | 700                    | 1.9                      | 2                       | 25                      | 34                         |
| 14–18            | 1500                  | 2300                    | 3000                     | 1300                    | 1250                       | 410                       | 11                   | 11                   | 150                    | 55                       | 890                    | 2.2                      | 3                       | 35                      | 43                         |
| 19–30            | 1500                  | 2300                    | 3400                     | 1000                    | 700                        | 400                       | 8                    | 11                   | 150                    | 55                       | 900                    | 2.3                      | 4                       | 35                      | 45                         |
| 31–50            | 1500                  | 2300                    | 3400                     | 1000                    | 700                        | 420                       | 8                    | 11                   | 150                    | 55                       | 900                    | 2.3                      | 4                       | 35                      | 45                         |
| 51–70            | 1300                  | 2000                    | 3400                     | 1000                    | 700                        | 420                       | 8                    | 11                   | 150                    | 55                       | 900                    | 2.3                      | 4                       | 30                      | 45                         |
| >70              | 1200                  | 1800                    | 3400                     | 1200                    | 700                        | 420                       | 8                    | 11                   | 150                    | 55                       | 900                    | 2.3                      | 4                       | 30                      | 45                         |
| <b>Females</b>   |                       |                         |                          |                         |                            |                           |                      |                      |                        |                          |                        |                          |                         |                         |                            |
| 9–13             | 1500                  | 2300                    | 2300                     | 1300                    | 1250                       | 240                       | 8                    | 8                    | 120                    | 40                       | 700                    | 1.6                      | 2                       | 21                      | 34                         |
| 14–18            | 1500                  | 2300                    | 2300                     | 1300                    | 1250                       | 360                       | 15                   | 9                    | 150                    | 55                       | 890                    | 1.6                      | 3                       | 24                      | 43                         |
| 19–30            | 1500                  | 2300                    | 2600                     | 1000                    | 700                        | 310                       | 18                   | 8                    | 150                    | 55                       | 900                    | 1.8                      | 3                       | 25                      | 45                         |
| 31–50            | 1500                  | 2300                    | 2600                     | 1000                    | 700                        | 320                       | 18                   | 8                    | 150                    | 55                       | 900                    | 1.8                      | 3                       | 25                      | 45                         |
| 51–70            | 1300                  | 2000                    | 2600                     | 1200                    | 700                        | 320                       | 8                    | 8                    | 150                    | 55                       | 900                    | 1.8                      | 3                       | 20                      | 45                         |
| >70              | 1200                  | 1800                    | 2600                     | 1200                    | 700                        | 320                       | 8                    | 8                    | 150                    | 55                       | 900                    | 1.8                      | 3                       | 20                      | 45                         |
| <b>Pregnancy</b> |                       |                         |                          |                         |                            |                           |                      |                      |                        |                          |                        |                          |                         |                         |                            |
| ≤18              | 1500                  | 2300                    | 2600                     | 1300                    | 1250                       | 400                       | 27                   | 12                   | 220                    | 60                       | 1000                   | 2.0                      | 3                       | 29                      | 50                         |
| 19–30            | 1500                  | 2300                    | 2900                     | 1000                    | 700                        | 350                       | 27                   | 11                   | 220                    | 60                       | 1000                   | 2.0                      | 3                       | 30                      | 50                         |
| 31–50            | 1500                  | 2300                    | 2900                     | 1000                    | 700                        | 360                       | 27                   | 11                   | 220                    | 60                       | 1000                   | 2.0                      | 3                       | 30                      | 50                         |
| <b>Lactation</b> |                       |                         |                          |                         |                            |                           |                      |                      |                        |                          |                        |                          |                         |                         |                            |
| ≤18              | 1500                  | 2300                    | 2500                     | 1300                    | 1250                       | 360                       | 10                   | 13                   | 290                    | 70                       | 1300                   | 2.6                      | 3                       | 44                      | 50                         |
| 19–30            | 1500                  | 2300                    | 2800                     | 1000                    | 700                        | 310                       | 9                    | 12                   | 290                    | 70                       | 1300                   | 2.6                      | 3                       | 45                      | 50                         |
| 31–50            | 1500                  | 2300                    | 2800                     | 1000                    | 700                        | 320                       | 9                    | 12                   | 290                    | 70                       | 1300                   | 2.6                      | 3                       | 45                      | 50                         |

NOTE: For all nutrients, values for infants are AI. The glossary on the inside back cover defines units of nutrient measure.

**Tolerable Upper Intake Levels (UL) for Minerals**

| Age (yr)           | Sodium<br>(mg/day) | Chloride<br>(mg/day) | Calcium<br>(mg/day) | Phosphorus<br>(mg/day) | Magnesium<br>(mg/day) <sup>a</sup> | Iron<br>(mg/day) | Zinc<br>(mg/day) | Iodine<br>(µg/day) | Selenium<br>(µg/day) | Copper<br>(µg/day) | Manganese<br>(mg/day) | Fluoride<br>(mg/day) | Molybdenum<br>(µg/day) | Boron<br>(mg/day) | Nickel<br>(mg/day) | Vanadium<br>(mg/day) |
|--------------------|--------------------|----------------------|---------------------|------------------------|------------------------------------|------------------|------------------|--------------------|----------------------|--------------------|-----------------------|----------------------|------------------------|-------------------|--------------------|----------------------|
| <b>Infants</b>     |                    |                      |                     |                        |                                    |                  |                  |                    |                      |                    |                       |                      |                        |                   |                    |                      |
| 0–0.5              | —                  | —                    | 1000                | —                      | —                                  | 40               | 4                | —                  | 45                   | —                  | —                     | 0.7                  | —                      | —                 | —                  | —                    |
| 0.5–1              | —                  | —                    | 1500                | —                      | —                                  | 40               | 5                | —                  | 60                   | —                  | —                     | 0.9                  | —                      | —                 | —                  | —                    |
| <b>Children</b>    |                    |                      |                     |                        |                                    |                  |                  |                    |                      |                    |                       |                      |                        |                   |                    |                      |
| 1–3                | 1500               | 2300                 | 2500                | 3000                   | 65                                 | 40               | 7                | 200                | 90                   | 1000               | 2                     | 1.3                  | 300                    | 3                 | 0.2                | —                    |
| 4–8                | 1900               | 2900                 | 2500                | 3000                   | 110                                | 40               | 12               | 300                | 150                  | 3000               | 3                     | 2.2                  | 600                    | 6                 | 0.3                | —                    |
| 9–13               | 2200               | 3400                 | 3000                | 4000                   | 350                                | 40               | 23               | 600                | 280                  | 5000               | 6                     | 10                   | 1100                   | 11                | 0.6                | —                    |
| <b>Adolescents</b> |                    |                      |                     |                        |                                    |                  |                  |                    |                      |                    |                       |                      |                        |                   |                    |                      |
| 14–18              | 2300               | 3600                 | 3000                | 4000                   | 350                                | 45               | 34               | 900                | 400                  | 8000               | 9                     | 10                   | 1700                   | 17                | 1.0                | —                    |
| <b>Adults</b>      |                    |                      |                     |                        |                                    |                  |                  |                    |                      |                    |                       |                      |                        |                   |                    |                      |
| 19–50              | 2300               | 3600                 | 2500                | 4000                   | 350                                | 45               | 40               | 1100               | 400                  | 10,000             | 11                    | 10                   | 2000                   | 20                | 1.0                | 1.8                  |
| 51–70              | 2300               | 3600                 | 2000                | 4000                   | 350                                | 45               | 40               | 1100               | 400                  | 10,000             | 11                    | 10                   | 2000                   | 20                | 1.0                | 1.8                  |
| >70                | 2300               | 3600                 | 2000                | 3000                   | 350                                | 45               | 40               | 1100               | 400                  | 10,000             | 11                    | 10                   | 2000                   | 20                | 1.0                | 1.8                  |
| <b>Pregnancy</b>   |                    |                      |                     |                        |                                    |                  |                  |                    |                      |                    |                       |                      |                        |                   |                    |                      |
| ≤18                | 2300               | 3600                 | 3000                | 3500                   | 350                                | 45               | 34               | 900                | 400                  | 8000               | 9                     | 10                   | 1700                   | 17                | 1.0                | —                    |
| 19–50              | 2300               | 3600                 | 2500                | 3500                   | 350                                | 45               | 40               | 1100               | 400                  | 10,000             | 11                    | 10                   | 2000                   | 20                | 1.0                | —                    |
| <b>Lactation</b>   |                    |                      |                     |                        |                                    |                  |                  |                    |                      |                    |                       |                      |                        |                   |                    |                      |
| ≤18                | 2300               | 3600                 | 3000                | 4000                   | 350                                | 45               | 34               | 900                | 400                  | 8000               | 9                     | 10                   | 1700                   | 17                | 1.0                | —                    |
| 19–50              | 2300               | 3600                 | 2500                | 4000                   | 350                                | 45               | 40               | 1100               | 400                  | 10,000             | 11                    | 10                   | 2000                   | 20                | 1.0                | —                    |

<sup>a</sup>The UL for magnesium applies to synthetic forms obtained from supplements or drugs only. NOTE: An Upper Limit was not established for vitamins and minerals not listed and for those age groups listed with a dash (—) because of a lack of data, not because these nutrients are safe to consume at any level of intake. All nutrients can have adverse effects when intakes are excessive.

SOURCE: Adapted from the *Dietary Reference Intakes series*, National Academies Press. National Academies of Sciences.