## FOOD AND NUTRITION BOARD, INSTITUTE OF MEDICINE—NATIONAL ACADEMY OF SCIENCES DIETARY REFERENCE INTAKES: ESTIMATED AVERAGE REQUIREMENTS

| Life Stage Group | Phosphorus (mg/d) | Magnesium (mg/d) | Thiamin (mg/d) | Riboflavin (mg/d) | Niacin (mg/d)[a] | Vitamin (mg/d) |
|---|---|---|---|---|---|---|
| Children | | | | | | |
| 1–3 y | 380 | 65 | 0.4 | 0.4 | 5 | 0.4 |
| 4–8 y | 405 | 110 | 0.5 | 0.5 | 6 | 0.5 |
| Males | | | | | | |
| 9–13 y | 1,055 | 200 | 0.7 | 0.8 | 9 | 0.8 |
| 14–18 y | 1,055 | 340 | 1.0 | 1.1 | 12 | 1.1 |
| 19–30 y | 580 | 330 | 1.0 | 1.1 | 12 | 1.1 |
| 31–50 y | 580 | 350 | 1.0 | 1.1 | 12 | 1.1 |
| 51–70 y | 580 | 350 | 1.0 | 1.1 | 12 | 1.4 |
| > 70 y | 580 | 350 | 1.0 | 1.1 | 12 | 1.4 |
| Females | | | | | | |
| 9–13 y | 1,055 | 200 | 0.7 | 0.8 | 9 | 0.8 |
| 14–18 y | 1,055 | 300 | 0.9 | 0.9 | 11 | 1.0 |
| 19–30 y | 580 | 255 | 0.9 | 0.9 | 11 | 1.1 |
| 31–50 y | 580 | 265 | 0.9 | 0.9 | 11 | 1.1 |
| 51–70 y | 580 | 265 | 0.9 | 0.9 | 11 | 1.3 |
| > 70 y | 580 | 265 | 0.9 | 0.9 | 11 | 1.3 |
| Pregnancy | | | | | | |
| ≤ 18 y | 1,055 | 335 | 1.2 | 1.2 | 14 | 1.6 |
| 19–30 y | 580 | 290 | 1.2 | 1.2 | 14 | 1.6 |
| 31–50 y | 580 | 300 | 1.2 | 1.2 | 14 | 1.6 |
| Lactation | | | | | | |
| ≤ 18 y | 1,055 | 300 | 1.2 | 1.3 | 13 | 1.7 |
| 19–30 y | 580 | 255 | 1.2 | 1.3 | 13 | 1.7 |
| 31–50 y | 580 | 265 | 1.2 | 1.3 | 13 | 1.7 |

**NOTE**: This table presents Estimated Average Requirements (EARs), which serve two purposes: for assessing adequacy of population intakes, and as the basis for calculating Recommended Dietary Allowances (RDAs) for individuals for those nutrients. EARs have not been established for calcium, vitamin D, fluoride, pantothenic acid, biotin, or choline, or other nutrients not yet evaluated via the Dietary Reference Intake (DRI) process.

[a] As niacin equivalents (NE). 1 mg of niacin = 60 mg of tryptophan.
[b] As dietary folate equivalents (DFE). 1 DFE = 1 μg food folate = 0.6 μg of folic acid from fortified food or as a supplement consumed with food = 0.5 μg of a supplement taken on an empty stomach.

DICINE—

| Niacin (mg/d)[a] | Vitamin $B_6$ (mg/d) | Folate (μg/d)[b] | Vitamin $B_{12}$ (μg/d) | Vitamin C (mg/d) | Vitamin E (mg/d)[c] | Selenium (μg/d) |
|---|---|---|---|---|---|---|
| 5 | 0.4 | 120 | 0.7 | 13 | 5 | 17 |
| 6 | 0.5 | 160 | 1.0 | 22 | 6 | 23 |
| 9 | 0.8 | 250 | 1.5 | 39 | 9 | 35 |
| 12 | 1.1 | 330 | 2.0 | 63 | 12 | 45 |
| 12 | 1.1 | 320 | 2.0 | 75 | 12 | 45 |
| 12 | 1.1 | 320 | 2.0 | 75 | 12 | 45 |
| 12 | 1.4 | 320 | 2.0 | 75 | 12 | 45 |
| 12 | 1.4 | 320 | 2.0 | 75 | 12 | 45 |
| 9 | 0.8 | 250 | 1.5 | 39 | 9 | 35 |
| 11 | 1.0 | 330 | 2.0 | 56 | 12 | 45 |
| 11 | 1.1 | 320 | 2.0 | 60 | 12 | 45 |
| 11 | 1.1 | 320 | 2.0 | 60 | 12 | 45 |
| 11 | 1.3 | 320 | 2.0 | 60 | 12 | 45 |
| 11 | 1.3 | 320 | 2.0 | 60 | 12 | 45 |
| 14 | 1.6 | 520 | 2.2 | 66 | 12 | 49 |
| 14 | 1.6 | 520 | 2.2 | 70 | 12 | 49 |
| 14 | 1.6 | 520 | 2.2 | 70 | 12 | 49 |
| 13 | 1.7 | 450 | 2.4 | 96 | 16 | 59 |
| 13 | 1.7 | 450 | 2.4 | 100 | 16 | 59 |
| 13 | 1.7 | 450 | 2.4 | 100 | 16 | 59 |

[c] As α-tocopherol. α-Tocopherol includes *RRR*-α-tocopherol, the only form of α-tocopherol that occurs naturally in foods, and the *2R*-stereoisomeric forms of α-tocopherol (*RRR*-, *RSR*-, *RRS*-, and *RSS*-α-tocopherol) that occur in fortified foods and supplements. It does not include the *2S*-stereoisomeric forms of α-tocopherol (*SRR*-, *SSR*-, *SRS*-, and *SSS*-α-tocopherol), also found in fortified foods and supplements.

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