

## Intake Recommendations for Selected Nutrients During Infancy

Nutrient	Recommended intake	Comments
Energy	<p>EER = Total Energy Expenditure + energy deposition</p> <ul style="list-style-type: none"> <li>0-3 months: <math>(89 \times \text{weight [kg]} - 100) + 175</math> kcal</li> <li>4-6 months: <math>(89 \times \text{weight [kg]} - 100) + 56</math> kcal</li> <li>7-12 months: <math>(89 \times \text{weight [kg]} - 100) + 22</math> kcal</li> </ul>	<p>In general, healthy infants are able to adjust their intakes to meet energy needs. Recommendations for energy intake have been recently updated and are about 15% lower than previous guidelines.</p> <p><i>Example:</i> The energy requirement for a 4-week old infant who weighs 4 kg is estimated to be:</p> <ul style="list-style-type: none"> <li><math>(89 \times 4) - 100 + 175 = 356 - 100 + 175 = 431</math> kcal per day</li> </ul>
Protein	<p>AI (grams per kilogram per day)</p> <ul style="list-style-type: none"> <li>0-6 months: 1.52 g/kg/d</li> <li>7-12 months: 1.0 g/kg/d</li> </ul>	<p>Protein needs are highest during infancy because of needs for rapid growth. Some amino acids may be essential for premature infants.</p>
Fat	<p>AI (grams per day)</p> <ul style="list-style-type: none"> <li>0-6 months: 31 g/d</li> <li>7-12 months: 30 g/d</li> </ul>	<p>Total fat provides about 55% of the total energy intake for infants under 6 months of age; after the introduction of complementary foods, this decreases to about 40% for 7-12 month olds.</p>
Carbohydrate	<p>AI for carbohydrates (grams per day)</p> <ul style="list-style-type: none"> <li>0-6 months: 60 g/d</li> <li>7-12 months: 95 g/d</li> </ul>	<p>Carbohydrates provide about 37 percent of infants' total energy intake.</p>
Water	<p>AI for water (liters per day)</p> <ul style="list-style-type: none"> <li>0-6 months: 0.7 L/d</li> <li>7-12 months: 0.8 L/d</li> </ul>	<p>For 0-6 month olds, water intake is assumed to be from human milk. For older infants, water intake includes human milk and complementary foods and beverages (~0.6 L as total fluid, including breastmilk, formula, juice, and drinking water)</p>
Iron	<p>AI for iron (milligrams per day)</p> <ul style="list-style-type: none"> <li>0-6 months: 0.27 mg/d</li> </ul> <p>RDA for iron (milligrams per day)</p> <ul style="list-style-type: none"> <li>7-12 months: 11 mg/d</li> </ul>	<p>Iron needs of infants born prematurely may be higher, since the majority of iron accretion occurs during the last trimester of pregnancy.</p>
Zinc	<p>AI for zinc (milligrams per day)</p> <ul style="list-style-type: none"> <li>0-6 months: 2.0 mg/d</li> </ul> <p>RDA for zinc (milligrams per day)</p>	<p>Zinc absorption from breastmilk is highest, zinc in from cow's milk formula is more bioavailable than zinc in soy-based formulas. After the first 6 months, human milk is an inadequate source of zinc.</p>

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	<ul style="list-style-type: none"> <li>• 7-12 months: 3 mg/d</li> </ul>	
Vitamin K	AI for vitamin K (micrograms per day) <ul style="list-style-type: none"> <li>• 0-6 months: 2.0 µg/d</li> <li>• 7-12 months: 2.5 µg/d</li> </ul>	
Vitamin B12	AI for vitamin B12 (micrograms per day) <ul style="list-style-type: none"> <li>• 0-6 months: 0.4 µg/d</li> <li>• 7-12 months: 0.5 µg/d</li> </ul>	
Vitamin D	AI for vitamin D (international units per day) <ul style="list-style-type: none"> <li>• 0-6 months: 5 µg/d (200 IU/d)</li> <li>• 7-12 months: 5 µg/d (200 IU/d)</li> </ul>	Breastfed infants should receive 400 IU of vitamin D (oral) beginning soon after birth.