

## Recommended nutrient intakes<sup>a</sup> – minerals

Group	Calcium <sup>b</sup> (mg/day)	Selenium (µg/day)	Magnesium (mg/day)	Zinc <sup>c</sup> (mg/day)		
				High bioavailability	Moderate bioavailability	Low bioavailability
<b>Infants</b>						
0–6 months	300 <sup>d</sup>	6	26 <sup>d</sup>	1.1 <sup>d</sup>	2.8	6.6
	400 <sup>e</sup>		36 <sup>h</sup>			
7–12 months	400	10	54	0.8 <sup>d</sup> 2.5 <sup>i</sup>	4.1	8.4
<b>Children</b>						
1–3 years	500	17	60	2.4	4.1	8.3
4–6 years	600	22	76	2.9	4.8	9.6
7–9 years	700	21	100	3.3	5.6	11.2
<b>Adolescents</b>						
Females						
10–18 years	1300 <sup>k</sup>	26	220	4.3	7.2	14.4
Males						
10–18 years	1300 <sup>k</sup>	32	230	5.1	8.6	17.1
<b>Adults</b>						
Females						
19–50 years (premenopausal)	1000	26	220	3.0	4.9	9.8
51–65 years (menopausal)	1300	26	220	3.0	4.9	9.8
Males						
19–65 years	1000	34	260	4.2	7.0	14.0
<b>Elderly</b>						
Females						
65+ years	1300	25	190	3.0	4.9	9.8
Males						
65+ years	1300	33	224	4.2	7.0	14.0
<b>Pregnant women</b>						
First trimester	m	m	220	3.4	5.5	11.0
Second trimester	m	28	220	4.2	7.0	14.0
Third trimester	1200	30	220	6.0	10.0	20.0
<b>Lactating women</b>						
0–3 months	1000	35	270	5.8	9.5	19.0
3–6 months	1000	35	270	5.3	8.8	17.5
7–12 months	1000	42	270	4.3	7.2	14.4

<sup>a</sup> Recommended nutrient intake (RNI) is the daily intake which meets the nutrient requirements of almost all (97.5%) apparently healthy individuals in an age- and sex-specific population.

<sup>b</sup> See Chapter 4 for details.

<sup>c</sup> See Chapter 12 for details.

<sup>d</sup> Breastfed.

<sup>e</sup> Neonatal iron stores are sufficient to meet the iron requirement for the first 6 months in full-term infants. Premature infants and low birth weight infants require additional iron.

<sup>f</sup> Recommendation for the age group 0–4.9 years.

<sup>g</sup> Cow milk-fed.

<sup>h</sup> Formula-fed.

Table from: World Health Organization and Food and Agriculture Organization of the United Nations (2004). Vitamin and mineral requirements in human nutrition, 2nd ed. World Health Organization

Iron (mg/day)				
15% Bioavailability	12% Bioavailability	10% Bioavailability	5% Bioavailability	Iodine (µg/day)
e	e	e	e	90 <sup>f</sup>
6.2 <sup>i</sup>	7.7 <sup>i</sup>	9.3 <sup>i</sup>	18.6 <sup>i</sup>	90 <sup>f</sup>
3.9	4.8	5.8	11.6	90 <sup>f</sup>
4.2	5.3	6.3	12.6	90 <sup>f</sup>
5.9	7.4	8.9	17.8	120 (6–12 yrs)
9.3 (11–14 yrs) <sup>j</sup>	11.7 (11–14 yrs) <sup>j</sup>	14.0 (11–14 yrs) <sup>j</sup>	28.0 (11–14 yrs) <sup>j</sup>	150 (13–18 yrs)
21.8 (11–14 yrs)	27.7 (11–14 yrs)	32.7 (11–14 yrs)	65.4 (11–14 yrs)	
20.7 (15–17 yrs)	25.8 (15–17 yrs)	31.0 (15–17 yrs)	62.0 (15–17 yrs)	
9.7 (11–14 yrs)	12.2 (11–14 yrs)	14.6 (11–14 yrs)	29.2 (11–14 yrs)	150 (13–18 yrs)
12.5 (15–17 yrs)	15.7 (15–17 yrs)	18.8 (15–17 yrs)	37.6 (15–17 yrs)	
19.6	24.5	29.4	58.8	150
7.5	9.4	11.3	22.6	150
9.1	11.4	13.7	27.4	150
7.5	9.4	11.3	22.6	150
9.1	11.4	13.7	27.4	150
n	n	n	n	200
n	n	n	n	200
n	n	n	n	200
10.0	12.5	15.0	30.0	200
10.0	12.5	15.0	30.0	200
10.0	12.5	15.0	30.0	200

<sup>i</sup> Bioavailability of dietary iron during this period varies greatly.

<sup>j</sup> Not applicable to infants exclusively breastfed.

<sup>k</sup> Particularly during the growth spurt.

<sup>l</sup> Pre-menarche.

<sup>m</sup> Not specified.

<sup>n</sup> It is recommended that iron supplements in tablet form be given to all pregnant women because of the difficulties in correctly assessing iron status in pregnancy. In non-anaemic pregnant women, daily supplements of 100mg of iron (e.g. as ferrous sulphate) given during the second half of pregnancy are adequate. In anaemic women higher doses are usually required.

Table from: World Health Organization and Food and Agriculture Organization of the United Nations (2004). Vitamin and mineral requirements in human nutrition, 2nd ed. World Health Organization