

A comparison of the upper safe levels for total daily intake of micronutrients

(from the Scientific Committee on Food, SCF, the European Food Safety Authority, EFSA, and the US Institute of Medicine, IOM, and the daily levels for supplementation proposed by the UK Food Standards Agency Expert Group on Vitamins and Minerals, EVM)

Nutrient	Unit	SCF/EFSA total intake (UL)	IOM total intake (UL)	EVM for long-term supplementation (SUL) ⁽¹⁾
Vitamin A (Retinol)	µg	3000	3000	1500 (G, T)
Beta-Carotene	mg	Not set	Not set	7 (not for smokers)
Vitamin B1 (Thiamin)	mg	Not set	Not set	100 (G)
Vitamin B2 (Riboflavin)	mg	Not set	Not set	40 (G) (43T)
Vitamin B3 (Nicotinamide)	mg	900	35 ⁽³⁾	500 (G) (560T)
Vitamin B3 (Nicotinic acid)	mg	10	–	17
Vitamin B5 (Pantothenic acid)	mg	Not set	Not set	200 (G) (210T)
Vitamin B6 (Pyridoxine)	mg	25	100	200 (short term) ⁽⁴⁾ 10 (long term)
Vitamin B8 (Biotin)	µg	Not set	Not set	900 (G) (970T)
Vitamin B9 (Folic acid)	µg	1000 (+ dietary folate)	1000 supp. (+ 200 diet)	1000 (G) (1500T)
Vitamin B12 (Cyanocobalamin)	µg	Not set	Not set	2000 (G)
Vitamin C (Ascorbic acid)	mg	Not set	2000	1000 (G)
Vitamin D (Calciferol)	µg	50	50	25 (G)
Vitamin E (Tocopherol) ⁽²⁾	mg	300	1000	540 (800 IU)
Vitamin K (Phylloquinone)	µg	Not set	Not set	1000 (G)
Calcium (Ca)	mg	2500	2500	1500 (G)
Magnesium (Mg)	mg	250 as supplement	350 as supplement + diet	400 (G)
Phosphorus (P)	mg	Not set	4000	250 (G) (2400T)
Potassium (K)	mg	Not set	Not set	3700 (G)
Chromium (Cr, trivalent) ⁽⁵⁾	µg	Not set	Not set	10 (G, T)
Copper (Cu)	mg	5	10	1 (10T)
Fluoride (F)	mg	Not set	10	Outside terms of reference
Iodine (I)	µg	600	1100	500 (G) (940T)
Iron (Fe)	mg	Not set	45	17 (G)
Manganese (Mn)	mg	Not set	11	4 (G) (9–12T) 0.5 (G) for older people
Molybdenum (Mo)	µg	600	2000	Not set
Selenium (Se)	µg	300	400	350 (450T)
Zinc (Zn)	mg	25	40	25 (42T)

G, guidance level; T, total intake; IU, International Unit.

⁽¹⁾ All amounts relate to 60 kg bodyweight adult and figures in parentheses are total (T) amounts from all dietary sources.

⁽²⁾ D-alpha-tocopherol equivalents/day

⁽³⁾ This UL is applied to the total of all forms of niacin resultant on the IOM's decision to establish a lowest-observed-adverse-effect level (LOAEL) based on skin flushing by nicotinic acid. In the EU niacin supplements and niacin fortification are generally in the form of nicotinamide.

⁽⁴⁾ Implied in text of report.

⁽⁵⁾ Picolinates are excluded.