

## ANH-INTL SUGGESTED OPTIMAL DAILY INTAKE RANGE FOR MAGNESIUM

Micronutrient	ANH-Intl suggested optimal range for adults from all sources (food + supplements)	Key benefits with optimal intake	Potential risks from insufficiency or excess	Rationale for optimal range
VITAMINS				
Magnesium	375-1500 mg (supplementary doses >350 mg/d should be taken with food and/or as divided doses).	<p>Muscle function, neurotransmission, energy-yielding metabolism, electrolyte balance, psychological function (affects circulating levels of norepinephrine and synthesis of serotonin), protein synthesis, bones/teeth health, cell division (EFSA authorised health claims). Required for healthy cardiovascular system function.</p> <p><a href="#">Low intakes are common in Western diets and are associated with cardiovascular disease (CVD), type 2 diabetes, metabolic syndrome, and skeletal disorders.</a></p> <p><a href="#">May be useful in preventing arrhythmias, e.g. atrial tachycardia and fibrillation, ventricular fibrillation and tachycardia, and supraventricular tachycardia.</a></p> <p><a href="#">600-1000 mg/d shown to modestly reduce diastolic blood pressure by about 2.2 mmHg in patients with mild to moderate hypertension.</a></p> <p><a href="#">Magnesium normalises sleep organisation and related brain bioelectrical activity.</a></p>	Doses above US tolerable upper intake level (TUL) of 350 mg from supplements or medicines frequently cause loose stools and diarrhoea. The TUL does not include intake from food and water.	<p><a href="#">Should aim for Ca: Mg ratio (from all sources) of ~2 for optimal skeletal mineralisation.</a></p> <p>Supplementary higher daily doses (&gt;350 mg/d) should be delivered with food and/or in divided doses to avoid osmotic disturbance in GI tract and associated symptoms and loss of Mg and other nutrients.</p> <p><a href="#">Epidemiological studies of 200 mg/d in addition to diet was found not to improve CVD risk in Europe and USA, although it lowered ischemic heart disease.</a></p>

**NOTE:** There are insufficient data for most micronutrients (unless specified) to determine safety to preconceptual, pregnant or lactating women. Individuals with any health condition should consult their healthcare professional before taking any micronutrient above the Tolerable Upper Levels set by the [Institute of Medicine \(IOM\)](#) and the [European Food Safety Authority \(EFSA\)](#).