



Vitamin D - Cholecalciferol	
Description	A fat-soluble vitamin
Function	Helps the body to absorb and use calcium and phosphorus and is therefore essential for maintaining strong and healthy bones. Vitamin D is also important for the immune system and muscle growth, development and function.
Human Requirements	EU RDA: 5mcg
Dietary Intake¹	In the UK, the average adult daily diet provides: for men, 3.7µg, for women, 2.8µg.
Food Sources	All dairy products (apart from low fat), oily fish, eggs and fortified margarine. Food alone is unlikely to provide sufficient vitamin D and it is also formed by the action of sunlight on the skin.
Deficiency Symptoms	Poor growth, bone pain and deformities (ie rickets in children and osteomalacia in adults), constipation and muscle weakness.
Precautions / Contra-Indications	Vitamin D should be avoided in hypercalcaemia. Safe Upper Level: 25mcg ²
Pregnancy & Breastfeeding	No problems reported with normal intakes.
Adverse Effects	There is no risk of vitamin D toxicity from prolonged exposure to sunlight. Excessive intake leads to hypercalcaemia and its associated effects.
Interactions¹	Anticonvulsants may reduce effect of vitamin D by accelerating its metabolism. Calcium may increase risk of hypercalcaemia.
References	1. Mason, P. Dietary Supplements. Pharmaceutical Press, London, 2001. 2. Expert Group on Vitamins and Minerals, 2003.