



Pantothenic Acid - Vitamin B5	
Description	Pantothenic acid is also sometimes referred to as Vitamin B5, and is a water soluble vitamin. Pantothenic acid and calcium pantothenate are available in the form of tablets and capsules, but they are found mainly in multivitamin and mineral preparations.
Function	Pantothenic acid forms part of two substances, co-enzyme A and the acyl carrier protein. These have key roles in the release of energy from foods. Pantothenic acid is involved in the metabolism of protein and fat, and is also needed for healthy growth.
Human Requirements	EU RDA: 6mg
Dietary Intake	The average UK diet provides 5.1mg daily ¹
Food Sources	Fortified breakfast cereal, wholegrain bread, dairy products, liver, kidneys.
Deficiency Symptoms	Poor muscle co-ordination, muscle cramps, numbness and tingling, painful burning feet, depression, fatigue, weakness, headache and loss of appetite.
Precautions / Contra-Indications	None known Safe Upper Level (Guidance Level): 210mg total dietary intake per day ²
Pregnancy & Breastfeeding	Pantothenic acid is suitable to take during pregnancy
Adverse Effects	No adverse effects, except for occasional diarrhoea, have been reported in humans.
Interactions¹	Excessive alcohol intake may increase requirement for pantothenic acid. Oral contraceptives may also increase requirement for pantothenic acid. Adequate amounts of all B vitamins are required for optimal functioning as deficiency or excess of one B vitamin may lead to abnormalities in the metabolism of another.
References	<ol style="list-style-type: none"> 1. Mason, P. Dietary Supplements. Pharmaceutical Press, London, 2001. 2. Expert Group on Vitamins and Minerals, 2003.