

**Vitamin B1**

Vitamin B1, also known as Thiamin, is one of the group of B Vitamins. Vitamin B1 is a water-soluble vitamin, meaning that it is not stored in the body other than in very small amounts bound to enzymes.

Thiamin is the precursor of an enzyme, coenzyme thiamine pyrophosphate, which plays a vital role in the metabolism of carbohydrate, fat and alcohol. Thiamin helps to break down and release energy from the food we eat. Thiamin is essential for the nervous system, growth and fertility.

How much do we need each day?

This is determined by the amount of calories we have daily and amounts to:

- Adult men: 1 mg/day
- Adult women: 0.8 mg/day
- Children: 0.5-0.7 mg/day

Thiamin is widely distributed in foods. Wholegrain cereals, bread, fortified breakfast cereals; porridge oats, brown rice, yeast and yeast extracts, pork, nuts, pulses and vegetables are all good sources of the vitamin. Cereal products provide 40% of our total intakes. In the UK it is mandatory that all flour (except wholemeal flour) be fortified with vitamin B1. A recent survey showed that our average intakes of thiamine exceeds the recommended daily allowance, being between 1.6 mg and 2 mg per day. Only a very small proportion of the population had levels below the recommended daily allowance, making deficiency quite rare. Deficiency is most likely to occur in alcoholics, resulting in alcoholic neuropathy, also known as Wernicke-Korsakoff syndrome. A mild deficiency can cause tiredness, a poor appetite, headaches, muscle fatigue, poor concentration and depression.

Take note that Vitamin B1 is easily destroyed during food preparation and cooking, due to it's sensitivity to heat and oxygen. It is therefore best to keep an eye on cooking time. It is also suggested to serve vitamin B1- rich foods with garlic and onions, the allinin in these foods increases the absorption of this vitamin.

Excess thiamine is excreted via the urine. For those using supplements, a 100 mg per day is unlikely to cause any harm. Long-term supplementation of more than 3 g per day has been associated with a variety of neurological and dermatological symptoms.

How to get enough:

Food	Vitamin B 1 Content (mg)
150 g Grilled lean pork chop	1.3
200 g can red kidney beans	0.3
30 g of Frosties	0.3
50 g of almonds	0.1
150 g of wholemeal spaghetti	0.3