

Understanding Vitamin D

With many young people (and adults) spending an increasing amount of time indoors and less time outside, as well as most of us now using sunscreen when we do go in the sun, the incidence of Vitamin D deficiency is increasing. In fact, Vitamin D is now the most common nutritional deficiency worldwide.

In the UK, around one-quarter of the population is deficient in vitamin D, rising to around one-third in the winter months because winter sun in the northern hemisphere is not strong enough to enable Vitamin D production. Young people who rarely spend any time outside, and if they do, don't expose their arms and legs or use sunscreen, and people with darker skin tones are among the groups most at risk of vitamin D deficiency.

Did you know?

Vitamin D isn't actually a vitamin! Rather, it's a hormone the body makes when it's exposed to sunlight or absorbs it from food.

The main source of vitamin D is from sunlight. It is also present in specific foods, with the best natural sources being fatty fish such as salmon, tuna, and mackerel, and smaller amounts being provided by cheese, beef liver, egg yolks, milk and mushrooms. However, it is very hard to get enough vitamin D from diet alone.

Read more from the [British Dietetic Association](#) about Vitamin D deficiency and how to ensure you are getting enough, which includes taking supplements, especially in the winter months.

Why is vitamin D important?

Vitamin D promotes absorption of calcium from the gut and helps keep bones strong by helping with bone mineralisation. Children and young people who do not get enough vitamin D can develop rickets, which can cause permanent deformities to the bone, weaken muscles and reduced growth. Adults who don't get enough vitamin D can develop osteomalacia. This makes the bones softer as the minerals needed to keep them strong cannot get into the bone. People with osteomalacia experience bone pain and muscle weakness.

The role of vitamin D in brain health

There is now increasing recognition of the role vitamin D may play in the pathophysiology of depression, with substantial evidence of a significant relationship between depression and vitamin D deficiency.

However, more studies are needed to establish causal links and to increase understanding of the biology of vitamin D.

Further reading: <http://www.jneuropsychiatry.org/peer-review/antidepressant-effect-of-vitamin-d-a-literature-review.html>

What to do if you are worried

If you suspect you or your young person may be at risk of vitamin D deficiency or may have a deficiency, or if you or they have been feeling low and can't seem to feel more positive, make an appointment with your GP who can arrange for you/them to have a blood test.