



Vitamin D Information

Why do we need Vitamin D?

Vitamin D (which is sometimes called colecalciferol or ergocalciferol) is important for good health, growth and strong bones. It controls calcium levels in the blood, which is essential for the health of our bones.

Where do we get vitamin D from?

Unlike other vitamins, most of our vitamin D does not come from food. Instead, it is made by our bodies when we expose our skin to Ultra violet B rays from sunlight. These rays make the vitamin D for us when our skin is exposed to them. Only a small amount of our vitamin D (around 10%) comes from food. The foods which contain the most vitamin D are:

- Oily fish (tuna, salmon, and mackerel)
- Eggs
- Fortified food like some breakfast cereals and margarine

What about calcium?

A diet rich in calcium is also important for health; sources of calcium include milk, yogurt and cheese.

What happens if I don't have enough vitamin D?

This is called *vitamin D deficiency*. Most people with vitamin D deficiency have no symptoms and this is nothing to worry about. Some people may have suffered bone fractures before, or may be diagnosed with osteoporosis. In some cases, there may be severe pain or muscle weakness. Talk to your GP if you are concerned.

Why do people become deficient in the UK?

In the UK, Ultra Violet B rays from sunlight are only available in sufficient quantities for the skin to produce vitamin D approximately between 11 am to 3pm in the summer months from April to September. This is not enough for some people to make enough vitamin D, especially in winter. Vitamin D deficiency can be quite common in the UK for this reason.

Who is at risk of vitamin D deficiency?

- People who have darker skin colour.
- People who cover a lot of their skin for religious or cultural reasons.
- People who are housebound or spend most of their day indoors.
- Vegans and vegetarians because they do not get vitamin D from fish or eggs.
- People taking certain medicines (i.e. medicines for epilepsy or HIV, rifampicin or cholestyramine).
- People who have certain medical conditions (such as Crohn's Disease).

Many people who are deficient in vitamin D have a number of these risk factors.

Ask your GP or pharmacist for advice if you have been advised to wear sunscreens by your GP for a medical reason.

How can I avoid becoming deficient?

Aim to go outside and expose your bare face, arms and legs to direct sunlight at least 2-3 times each week between 11am and 3pm for around 10-15 minutes at a time. People with darker skin should expose their skin for 25-30 minutes at a time. Avoid the use of sunscreen for these short times. Doing this in the UK summer months will ensure you have enough vitamin D stored in your body to last throughout the year. If you can, try to include oily fish, eggs, dairy and fortified foods (fortified cereals, margarine for example) in your diet.

Can I buy vitamin D supplements?

The government recommends that all adults should consider taking a daily multivitamin or vitamin D tablet or capsule that contains a small vitamin D dose of 10 micrograms (400 units), particularly in autumn and winter (October to March). People who do not have much sun exposure in the summer are advised to take a vitamin D supplement all year round. Supplements should be bought at low cost from any pharmacy or health food shop. If you are pregnant or breastfeeding you may be eligible for vitamins via the Healthy Start Scheme – see www.healthystart.nhs.uk or ask at your local Health Centre or Children's Centre.