

Patient Information leaflet on Vitamin D

The sunshine vitamin



Why do we need vitamin D?

Vitamin D helps to regulate the amount of calcium and phosphate in the body. It helps to keep bones, teeth and muscles healthy.

Sources of Vitamin D

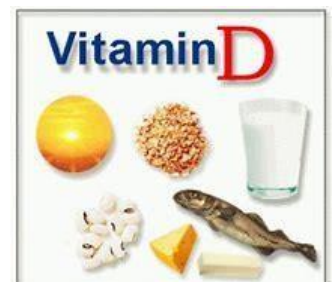
Safe sun exposure

The vitamin is made by our body under the skin in reaction to sunlight. Exposing commonly uncovered areas of the skin (such as the forearms and hands) for short periods when in strong sunlight March/April to the end of September provides Vitamin D. Longer periods of exposure may be needed for those with darker skin. During this time, it is important to avoid sunburn.

Dietary intake of Vitamin D

Rich sources of Vitamin D include:

Oily fish (salmon, mackerel, and sardines), egg yolk, red meat, liver, mushrooms, and fortified foods (such as fat spreads and some breakfast cereals and yoghurts)



Supplementation

It's difficult for people to get enough Vitamin D from food alone; Government advice is that everyone (including pregnant and breastfeeding women) should consider taking a daily supplement during the autumn and winter.

People at risk of low vitamin D levels

Some people are at high risk of Vitamin D deficiency because they have little or no sunshine exposure. **You should take a daily supplement throughout the year if you:**

- are not often outdoors – for example, if you're frail or housebound
- are in a live in setting such as a care home
- usually wear clothes that cover up most of your skin when outdoors
- have dark skin



You can purchase your own Vitamin D supplements to take daily from a wide range of supermarkets, health food shops and pharmacies. You should take between 400 units to 1000 units daily (10 micrograms to 25 micrograms).

If you are at higher risk for low Vitamin D levels, you should take a minimum of 800 units daily (20 micrograms). This includes:

- People aged 65 years or over
- People who have had a previous fragility fracture
- People who have been diagnosed with a movement disorder (e.g. Parkinsons)
- People who have previously had Vitamin D deficiency confirmed by their doctor

Why do we need calcium?

Calcium is also vital for strong teeth and bones. Most people should be able to get enough calcium through healthy eating. The daily recommended amount of calcium does vary with age, however, 700 milligrams daily is enough to meet the daily requirements for nearly all of the adult population.

You can calculate your calcium intake using this [online calcium calculator](#) from the University of Edinburgh.

Dietary intake of calcium

Examples of foods that are high in calcium are:

Dairy products such as milk, yoghurt and cheese; green leafy vegetables such as broccoli, cabbage and okra; soya beans, tofu, nuts, bread and anything made with fortified flour; fish where you eat the bones, such as sardines and pilchards.

Although spinach contains a lot of calcium, it also contains oxalate, which reduces calcium absorption, and it is therefore not a good source of calcium.

Most patients can purchase Vitamin D and calcium supplements at low cost; however, certain high-risk patients may be prescribed calcium and/or Vitamin D via their GP practice.

For Further Information

Contact your local pharmacist

NHS choices – [Vitamin D - NHS \(www.nhs.uk\)](http://www.nhs.uk)

Patient UK - [Vitamin D Deficiency \(Causes, Symptoms, and Treatment\) | Patient](#)

NHS choices - [Food for healthy bones - NHS \(www.nhs.uk\)](http://www.nhs.uk)