

# Vitamin D Deficiency (very low vitamin D levels)

Your recent blood result shows that you have a low vitamin D level. Vitamin D is needed to absorb calcium to make healthy bones. Low vitamin D can produce various symptoms such as bone pain, muscle weakness and tiredness. It is therefore important to ensure you are getting enough vitamin D. The main source of vitamin D is from sunlight, this does not require you to sunbathe but we would recommend exposing your face and forearms for about 15 minutes most days in the summer between 11am to 3pm without sunscreen. There are a few foods that contain vitamin D with the most significant amount in oily fish such as salmon and tuna. Small amounts are available in eggs, and fortified breakfast cereals. In many cases it is not possible for everyone to obtain enough vitamin D through sunlight and diet alone.

As your levels suggest you have very low vitamin D levels and you will need a high dose course of vitamin D treatment to replenish your stores. Once your stores are adequately replenished you are likely to require vitamin D supplements lifelong to ensure your levels do not drop again.

We have prescribed you a course of high dose vitamin D capsules containing 20,000 units of vitamin D which you will take 1 capsule twice a week for 8 weeks. If you feel you are experiencing any side effects please stop the tablets and seek advice from your doctor.

After 3 months from the beginning of the treatment we would like you to book a repeat blood test to recheck your vitamin D levels. Your doctor will then decide if you need any further high dose vitamin D or whether you can now continue with low dose vitamin D supplements which are easily available from Boots and other health shops. (examples of these are listed at the end).

After your course of high dose vitamin D, it is important for you to know that unless you continue with supplements long term your vitamin D levels are likely to drop again. This may bring on symptoms such as muscle weakness, bone pain and general tiredness. It may also increase your risk of osteoporosis, a condition which causes 'thinning of the bones' and is likely to increase your risk of fractures in old age. (Note there may be some cases, where your doctor will advise you not to take anymore supplements for a given length of time if your vitamin D levels become too high.)

Please remember that vitamin D is used to absorb calcium into bones. It is therefore important to consume foods that have enough calcium which is often found in dairy products and fortified breakfast cereals. If you feel your intake of these foods is low then please speak to a doctor as you may require calcium supplements as well as vitamin D.

Following your high dose vitamin D treatment most people are likely to require supplements between 400 units (10mcg) and 1000 units (25mcg) of vitamin D daily to maintain normal vitamin D levels. Examples of some vitamin D preparations are listed below, the following are all suitable for vegetarians. You may find others beside these:

- Boots own brand Vitamin D 25mcg 1000 unit tablet: 1 tablet daily.
- Vitabiotics Ultra Vitamin D3 optimum level 1000IU (25mcg). 1 tablet daily. From Boots
- DLUX spray 400 daily Vitamin D oral spray. 1 spray daily. From Boots
- DLUX spray daily Vitamin D oral spray 1000. 1 spray daily. From Holland and Barrett.
- SunVit D3 tablets 1000 units (25mcg) (NOT Sunvite). 1 tablet daily. Online
- Valupak Vitamin D3. One tablet daily. From most chemists and online