

Some Facts about Vitamin D

What is Vitamin D?

Vitamin D is an important hormone which is needed for maintaining strong bones and muscles. Vitamin D works by improving the absorption of calcium from food. In order to be effective the diet must have sufficient calcium.

Vitamin D is formed mainly by the action of direct sunlight on the skin. Only a few minutes of sunlight a day is needed to make enough Vitamin D. Some Vitamin D is found in saltwater fish, in eggs and fats and oils, but it is difficult to get enough Vitamin D from food alone. Sun exposure (or Vitamin D tablets) is generally needed to meet the body's requirements.

What happens if you do not get enough vitamin D?

Insufficient Vitamin D can lead to bone and muscle weakness causing fractures and pain. The medical name for this is Osteomalacia (or bone softening).

People who do not have enough sun exposure are at particular risk of developing these problems because of insufficient Vitamin D. Low levels of Vitamin D have been found particularly in older people who are not able to get outside into the direct sunlight. Sunlight which comes through a glass window is not able to produce Vitamin D.

Certain medical problems such as diseases of the liver, kidneys, the small bowel and stomach, can also in some cases lead to insufficient Vitamin D levels. Some tablets for Epilepsy (Phenytoin and Tegretol) can also lead to low levels.

The symptoms of Vitamin D deficiency – widespread pain and weakness – can easily be dismissed as being due to “getting old” or “arthritis”. This is a pity as much improvement can be expected by treatment of this deficiency with supplements (vitamin tablets).

How can Vitamin D deficiency be avoided?

In order to avoid vitamin D deficiency, 30 to 45 minutes of direct sunlight exposure three or four times per week is probably quite enough.

A multivitamin tablet containing Vitamin D can be used if adequate sunlight exposure is not possible. The recommended dose of Vitamin D to avoid the problems of deficiency is 400-800 international units per day. Studies have shown that by supplementing Vitamin D, the number of bone fractures suffered by older people can be significantly reduced.

How can Vitamin D deficiency be treated?

The treatment of Vitamin D deficiency is actually quite easy. The difficulty is to think of the problem and to do the necessary blood tests to prove it.

People with the most severe deficiency may have much pain and weakness, but a lesser deficiency may not be so obvious. Even milder deficiency of Vitamin D may result in weaker bones and an increased risk of fracture.

Treatment again will be advice about adequate sunlight exposure and/or supplementation with Vitamin D in tablet form. In order to be effective the diet must contain enough calcium. Good dietary sources of calcium are milk, cheese, yoghurt and some vegetables such as brussel sprouts. Low fat dairy products are suitable sources of calcium. Soy products also contain calcium.

Summary

Vitamin D deficiency is quite common in older people who are not able to get out into the direct sunlight. It can lead to pain and muscle weakness and can increase the risk of bone fracture.

Prevention and treatment is fairly easy and can lead to improved health. Your local doctor can provide advice and help with diagnosis and treatment.

Two supplements that can assist with Vitamin D deficiency are:

Vitamin D = Ostelin – 1000

Calcium = Caltrate 600mg

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