



## Fact Sheet 23

## Vitamin D deficiency

Vitamin D is an important nutrient that our bodies need to stay healthy!

### Why do our bodies need vitamin D?

Vitamin D works with calcium to keep our bones, teeth and muscles strong. Vitamin D acts like a bridge and allows calcium to cross over into our bones so they can be hard and strong.

### What happens when our bodies do not have enough vitamin D?

In children, a low vitamin D level can cause arms or legs to become bowed (a disease called rickets). Without enough vitamin D, and calcium too, bones cannot grow strong and straight, instead bones may become weaker and bend.

In adults a low vitamin D level will make bones weaker and more likely to break. This condition is called osteoporosis. A good vitamin D level can help improve muscle strength and balance to prevent falls.

### How do we know if our vitamin D levels are too low?

We cannot always feel when we have low vitamin D levels but sometimes symptoms might be bone aches and pains (especially around joints and the back) or muscle weakness.

### Where do our bodies get vitamin D from?

Almost all of the vitamin D in our body is formed through the action of sunlight onto exposed skin.

### Are there any foods that contain vitamin D?

Food is a poor source of vitamin D. Very small amounts of vitamin D are found in foods like meat, eggs, margarine and fish and fish liver oils. However it is not possible to eat enough of these foods in order to have healthy vitamin D levels.

### What things might prevent me from getting enough sunlight?

In winter months there is less sunlight and it is often too cold to go outside so our body's vitamin D levels can become low during this time.

Wearing concealing clothing when outdoors also reduces the level of sunlight on skin.

Do you have dark skin? Darker skin takes almost twice as long as light skin to produce vitamin D.

Working night shift or remaining indoors for lengthy periods may mean that you will have less exposure to sunlight

All of these factors may prevent adequate exposure to sunlight.

### What should I do if my vitamin D levels are likely to be low?

If you are concerned that your vitamin D levels might be low it is important to seek medical advice. A low Vitamin D level is not always apparent, but can be confirmed with a simple blood test. Treatment with Vitamin D supplements may be required, along with increasing exposure to sunlight.

### **How much sunlight do I need to get enough vitamin D?**

It is recommended that during summer you need 5 – 10 minutes of sunlight on your hands, arms and face everyday. In the winter months you need longer, 10 – 15 minutes a day is recommended. The safest time to be in the sun is before 10 am and after 4pm.

### **But isn't it dangerous to be out in the sun?**

The light that assists our body to make vitamin D is the same light that causes our skin to burn. It is important to limit sun exposure to short periods when the sun is at its strongest.

If you are in the sun for an extended period of time and/or the middle of the day, use sun protection to prevent skin from burning. Use sunscreen and wear clothing to cover the skin.

### **What can I do if it is not appropriate for me to be uncovered outdoors?**

It is important to find somewhere you feel comfortable and safe to expose your hands, arms and face to the sun. This might be with a women's social group or in the backyard of the family home. If these options don't suit it is important to seek medical advice.

#### **Key Points!**

- Vitamin D comes from the sun working on our skin.
- Without Vitamin D bones, teeth and muscles can become weak.
- The safest time to be in the sun is before 10 am and after 4pm
- People with darker skin or who cover their bodies when outdoors are more likely to have low levels of Vitamin D.
- Visit your GP to have Vitamin D levels checked