



### **What is vitamin D?**

Vitamins help us to stay healthy. Vitamin D is needed for strong bones. We make vitamin D in our body. 90% of the vitamin D in our body is actually made from direct sunlight exposure onto our skin.

### **But it is never sunny in the UK?**

Fair skinned individuals need 20-30 minutes of sunlight at around midday, approximately three times a week. You can do this from March to October. The body will store Vitamin D for winter. The face and forearms should be uncovered. Sunscreen, moisturisers with sun screen and clothing block the ability of the body to make vitamin D. **WARNING:** Never get sunburnt or spend more than 20-30 minutes in sunlight. This would increase the chances of skin cancer

Elderly people and individuals with pigmented skin need more frequent sunlight exposure.

### **Can I get Vitamin D from food?**

It is very difficult to get vitamin D from food. However oily fish, cod liver oil, egg yolk have vitamin D in them.

### **How do I know if I have enough vitamin D in my body?**

From about late March/early April to the end of September, most people should be able to make all the vitamin D they need from sunlight and having a balanced diet. The body creates vitamin D from direct sunlight on the skin when outdoors.

### **Should I take a supplement?**

Between October and early March we do not make enough vitamin D from sunlight so you need to get vitamin D from your diet.

But since it's difficult for people to get enough vitamin D from food alone, *everyone* (including pregnant and breastfeeding women) should consider taking a daily supplement containing 10 micrograms of vitamin D during the autumn and winter.

This is now the advice that is given to *everyone* see

<https://www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d/>

### **What supplement should I take?**

You can buy a daily vitamin D supplement from a pharmacy or supermarket. It should contain 800-2000 international units\* a day. Supplements are not on prescription but can be brought over the counter at any pharmacy, pound shop or supermarket. It will cost as little as £1 for a month's supply.

### What result means I am deficient in vitamin D

Result	What it means
<less than 25 mmol	<b>D</b> eficient in Vitamin D: you need a prescription for high dose vitamin D– see below
>25 mmol	Insufficient You should use a vitamin D supplement which you can purchase over-the-counter of any pharmacy, pound shop or supermarket as above.

At St Martin's Practice we find that it is actually more common to see Vitamin D deficiency on blood tests than it is to see normal levels!

The situation is complicated though. Studies on black Americans showed that they had low vitamin D levels compared to white Americans. 77-96% of the black participants tested would have been classed as vitamin D deficient. BUT, those black Americans actually had stronger bones (on bone scans) compared to the white Americans.

### How is deficiency treated?

- If you have Vitamin D **d**eficiency on a blood test then you need a prescription of high dose vitamin D from the doctor. Doctor will arrange a prescription for you to collect from your usual pharmacy, and will inform you about this by text.
- When the high dose Vitamin D treatment is finished then you should book yourself a blood test 4 weeks after finishing treatment.
- After the treatment is finished, then you should buy a daily vitamin supplement and you should take this daily for life. It should contain 800-2000 international units\* a day. The supplements will not be on prescription but can be brought over the counter at any pharmacy. It will cost as little as £1 for a month's supply. **No further testing is needed.**
- \*An international unit is a commonly used unit to state the dose of vitamin D. However some brands do use other units such as micrograms. If the brand you are choosing does not state the dose in international units, then please ask advice from the pharmacy.