**The information in this leaflet is for adults only**

**Low Vitamin D levels in adults**

You have been given this leaflet because you doctor feels you are at risk of low vitamin D levels or has found you have a low vitamin D level. This leaflet tells you how to prevent low vitamin D levels in the future. Some people will need a boost of high dose vitamin D and can then follow the advice in this leaflet, for others the advice in this leaflet may be all you need to follow.

**Why do we need Vitamin D?**

Vitamin D helps regulate the amount of calcium and phosphate in the body. These nutrients are needed to keep bones, teeth and muscles healthy. A lack of vitamin D can lead to bone deformities such as [rickets](http://www.nhs.uk/conditions/rickets/pages/introduction.aspx) in children, and bone pain caused by a condition called osteomalacia in adults.

**Where do I get Vitamin D from?**

Nearly all the vitamin D we obtain is made in our body from sunlight (around 90%), so safe sun exposure is important. Only a very small amount of vitamin D comes from the foods we eat. However, it is still important to eat foods that contain vitamin D as part of a balanced diet.

**Safe sun exposure**

Exposing relatively small areas of skin (such as forearms and hands) when in the sun for short periods can provide vitamin D. The best way to increase vitamin D levels for most people is by spending time outdoors regularly over the summer months.

* Regular exposure for short periods (about 10 minutes or if you burn easily than less than the time it takes for skin to redden or burn) between 11am and 3pm from the beginning of April to mid-October in the UK is adequate for most people with fair skin
* Prolonged exposure (for example, leading to burning or dark tanning) is not a safe way to gain vitamin D
* It is important to check the skin regularly for any changes (such as changes to moles that occur over weeks or several months) and see your GP if you detect any changes.

It is also important to eat foods which contain vitamin D regularly. However, this cannot make up for lack of sunlight exposure. This is why many people are advised to take vitamin D supplements.

Between October and early March we don't get enough vitamin D from sunlight because the sun isn't strong enough so we need to get vitamin D from our diet for the body to make vitamin D.

**Diet**

Vitamin D is found in a small number of foods including:

* oily fish – such as salmon, sardines, herring, kipper, mackerel and fresh tuna
* red meat
* liver
* egg yolks
* mushrooms
* cheese, milk and butter (very small amounts)
* fortified foods – such as most fat spreads and some breakfast cereals

**Should I take a vitamin D supplement?**

You can buy vitamin D supplements or vitamin drops containing vitamin D at most pharmacies, supermarkets and health food shops.

Everyone should consider taking a daily supplement containing 10mcg (400 units) of vitamin D during the autumn and winter.

Some people won't get enough vitamin D from sunlight because they have very little or no sunshine exposure or their needs for vitamin D are increased. It is recommended that you take a daily supplement containing 10mcg (400units) of vitamin D if you:

* are pregnant (for the duration of pregnancy)
* breastfeeding (until you stop breastfeeding)
* aren't often outdoors – for example, if you are housebound
* are in a care home on another similar place of residence
* usually wear clothes that cover up most of your skin when outdoors
* are from a minority ethnic group with dark skin, such as African, African-Caribbean or south Asian
* are taking certain medications e.g. medicines for epilepsy
* suffer from a condition of the stomach and intestines that means you can’t absorb vitamin D
* are a vegan or vegetarian

Pregnant or breastfeeding women can obtain vitamin D through the Healthy Start Scheme, if you want to apply for Healthy Start vouchers or find out more about the scheme please call the help line at the Healthy Start Issuing Unit on 0345 607 6823 or visit <https://www.healthystart.nhs.uk/healthy-start-vouchers/healthy-start-vitamins/>

REMEMBER – pregnant women should avoid taking multivitamins containing vitamin A (retinol) due to risk of vitamin A causing abnormalities in the foetus.

If in doubt - ask your doctor, nurse or pharmacist which is the right dose for you:

□ A preparation containing 10 micrograms (400 units) of vitamin D

□ A preparation containing 25 micrograms (1,000 units) of vitamin D

□ Healthy Start women’s vitamin tablets