

## Self-Care Information on Vitamin D

### Why do we need vitamin D?

Vitamin D helps to regulate the amount of calcium and phosphate in the body. It helps to keep bones, teeth and muscles healthy.

A lack of vitamin D can lead to bone deformities such as rickets in children, and bone pain and tenderness as a result of a condition called osteomalacia in adults.

### Sources of vitamin D

From late March/April to the end of September, most of us should be able to get all the vitamin D we need from sunlight on our skin. The vitamin is made by our body under the skin in reaction to sunlight.

If you are out in the sun, take care to cover up or protect your skin with sunscreen before you get burnt. Between October and early March we don't get any vitamin D from sunlight, so it is important to get this from food or supplements.

Vitamin D is also found in a small number of foods. Good food sources are:

- oily fish – such as salmon, sardines, herring and mackerel
- red meat
- liver
- egg yolks
- fortified foods such as most fat spreads and some breakfast cereals

### Do I need to take a vitamin D supplement?

#### Adults and children over five

Public Health England advises all adults and children over five years to consider taking a daily supplement containing 10mcg (400 units) of vitamin D daily, particularly during autumn and winter.

People who have a higher risk of vitamin D deficiency are advised to take a 10mcg (400 units) supplement all year round.

### **People at higher risk include:**

- Pregnant and breastfeeding women.
- Older people, aged 65 years and over.
- People who have low or no exposure to the sun, for example those who cover their skin for cultural reasons or who are housebound.
- People with darker skin, for example people of African, African-Caribbean or South Asian origin.
- Vegans and those who do not eat fish, or generally have a poor diet.
- People who are obese (BMI>30kg/m<sup>2</sup>) or have had a gastric bypass.
- People who have malabsorption syndromes or are taking certain drugs (antiresorptives, anticonvulsants, rifampicin.)
- People who have a family history of vitamin D deficiency.

### **Infants and children under five**

**Breastfed babies from birth to one year of age** should be given a daily supplement containing 8.5 to 10mcg of vitamin D, to make sure they get enough.

**Babies fed infant formula** should **not** be given a vitamin D supplement until they are receiving less than 500ml (about a pint) of infant formula a day, because infant formula is fortified with vitamin D.

**Children aged 1 to 4 years old** should be given a daily supplement containing 10mcg of vitamin D.

### **Will my GP / consultant prescribe me supplements?**

No, your GP / consultant will not prescribe any daily vitamin D supplements; these will need to be purchased.

Your GP / consultant will prescribe a loading dose of vitamin D **only if you are Vitamin D deficient** (<30nmol/L for adults and <50nmol/L for

children). After this you should purchase your own vitamin D supplements to take daily.

### **Supplements for adults**

Supplements suitable for adults are available to purchase in a wide range of supermarkets, health food shops and pharmacies from approximately £2.00 for 90 tablets.

### **Supplements for pregnant women**

There are also a wide range of supplements suitable for pregnant women available to purchase in supermarkets and pharmacies. Some pregnant women are eligible to receive Healthy Start vitamins free, speak to your midwife or visit the Healthy Start website below to find out more.

### **Supplements for children**

There are many supplements suitable for children that are available in supermarkets and pharmacies. These start from approximately £1.50 for 30 tablets. Some children under 4 years are eligible to receive free Healthy Start vitamins. Visit the [healthy start](#) website for further information.

If you need any further information please visit;

- Your local pharmacist
- NHS Choices – [www.nhs.uk](http://www.nhs.uk)
- Patient UK – [www.patient.co.uk](http://www.patient.co.uk)