

Vitamin D Deficiency

Information and advice for patients

Nutrition & Dietetics

What does vitamin D do?

Vitamin D helps the normal development of bones, teeth, and nerves. It also keeps your heart healthy.

What happens if I don't get enough vitamin D?

A deficiency (low level) of vitamin D in the body over a long period of time causes a condition called rickets. Rickets leads to symptoms such as bone pain, bending of bones, muscle weakness, and waddling when walking. Low vitamin D levels before these symptoms occur can be picked up by having a blood test.

Who is at risk?

People at risk of having a vitamin D deficiency include:

- Pregnant and breastfeeding mothers
- Babies who are breastfed after the age of 6 months
- Babies who take less than 500ml (18 ounces) a day of formula milk
- People with dark skin e.g. Asian, Afro-Caribbean, African populations
- People who wear clothing that covers the majority of the skin

Where do we get vitamin D from?

Vitamin D is made by our bodies when our skin is exposed to sunlight. There are also certain foods that provide us with small amounts. It is difficult to provide recommended daily amounts (RDA) for vitamin D because we should be able to produce all the vitamin D we need within our bodies. As there is no way of measuring how much vitamin D is produced within our bodies we do not know exactly how much people need in their diet.

Dietary sources of vitamin D

If you are at risk of vitamin D deficiency it is sensible to try to include as many foods as possible from the list below in your diet. However, you will not be able to get all the vitamin D you need from food alone as they contain only tiny amounts of vitamin D. You may also need to take a vitamin D supplement.

- Egg yolk (the yellow part of the egg).
- Margarine (NB The food has to say it is margarine for it to contain vitamin D. Products known as a 'spread' do not have to contain vitamin D by law).
- A few breakfast cereals have added vitamin D (see below).
- A few yoghurts and processed cheeses contain added vitamin D (see below).
- Oily fish such as mackerel, sardines, fresh tuna (not tinned), salmon, herring, pilchards.

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Oily fish should be limited to 2 portions a week for women trying for a baby, who are pregnant or who are breastfeeding, and for children because of the Dioxin content. Dioxins are potentially toxic chemicals if eaten in large amounts. A portion of oily fish is 140 grams.

Foods with added vitamin D

Breakfast Cereals		
<ul style="list-style-type: none"> • Asda <ul style="list-style-type: none"> - Choco Flakes - Choco Hoops - Cornflakes - Honey Nut Cornflakes - Frosted Flakes - Golden Balls - Honey Hoops - Rice Snaps - Vitality 	<ul style="list-style-type: none"> • Sainsbury's <ul style="list-style-type: none"> - Choco Hooplas - Rice Pops - Frosted Flakes • Kellogg's <ul style="list-style-type: none"> - Honey Loops - Ricicles • Nestle <ul style="list-style-type: none"> - Coco Shreddies - Frosted Shreddies - Shreddies 	<ul style="list-style-type: none"> • Tesco <ul style="list-style-type: none"> - Choco Snaps - Frosted Flakes - Rice Snaps - Cornflakes - Honey & Nut Cornflakes

Yoghurts	
<ul style="list-style-type: none"> • Petit Filous • Munch Bunch <ul style="list-style-type: none"> - Alpha Pot - Fromage Frais - Whole Milk 	<ul style="list-style-type: none"> • Thomas & Friends Fromage Frais • Wildlife Fromage Frais

Cheese
<ul style="list-style-type: none"> • Dairylea <ul style="list-style-type: none"> - Spread - Slices - Triangles - Strip Cheese

Please note this list was correct at time of printing. Please check nutritional labels on a regular basis to ensure the above foods still contain vitamin D.

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Vitamin D supplements

In the UK it is recommended that all breastfed babies and breastfeeding mothers should have a vitamin D supplement (as drops or tablets). You may also need to take a vitamin D supplement if you are pregnant or unable to get enough sunlight. Ask your health visitor, health care professional or GP for further information.

Sources used for the information in this leaflet

- Expert Group on Vitamins and Minerals: Safe upper levels for vitamins and minerals, May 2003
- Department of Health publications: 'Vitamin D: an essential nutrient for all...but who is at risk of vitamin D deficiency? Important information for healthcare professionals', January 2010
- Scientific Advisory Committee on Nutrition (SACN): 'Update on Vitamin D: position statement', November 2007

If you would like to suggest any amendments or improvements to this leaflet please contact the communications department on 0121 507 5420 or email: swb-tr.swbh-gm-patient-information@nhs.net



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