

Vitamin D and you



Important health information
for everyone

Updated 2021

Why is vitamin D important?

Throughout life, vitamin D is essential for keeping bones healthy.

It is important for:

- pregnant women
- breastfeeding women
- babies
- young children under 5 years old

to get enough vitamin D when bones are growing.

Babies need enough vitamin D in their bodies before they are born. Without enough vitamin D children can be at risk of developing rickets, which causes weak and badly formed bones.

In adulthood and later life, lack of vitamin D can lead to osteomalacia (softening of the bones) and a greater risk of broken bones.



**Vitamin D
is important
for good
bone health.**




How do we get vitamin D?

We get vitamin D from sunlight and from some foods and supplements.

From sunlight

Our bodies can make most of the vitamin D we need through sunlight.

In Scotland, we only get enough of the right kind of sunlight for our bodies to make vitamin D in this way during roughly half the year (April to September), mostly between 11 am and 3 pm. This means some people are unlikely to get enough vitamin D from sunlight (see 'Should I take a vitamin D supplement?', overleaf).



It is difficult to get enough vitamin D from food alone.

The amount of sun needed to make enough vitamin D varies from person to person but is always less than the amount that causes tanning or sunburn. 10–15 minutes of unprotected Scottish sun exposure is safe for all, but care should always be taken to cover up or apply sunscreen before any exposed skin becomes red or begins to burn.

Sunbeds are not a recommended source of vitamin D.


Remember – if you use sunscreen correctly this will block UVB light. However, there should still be enough UVB reaching the skin to produce enough vitamin D during the summer.

From food

It is difficult to get enough vitamin D from food alone. However, it is found naturally in small amounts in:

- oily fish – both fresh and tinned – such as salmon, mackerel, trout, kippers and sardines
- eggs and meat.

Some foods have vitamin D added to them, including some breakfast cereals, soya and dairy products, powdered milks and low-fat spreads and margarines (amounts in these products vary and are often quite small).



Some people should take supplements.

Should I take a vitamin D supplement?

Research shows that many people in Scotland have low vitamin D levels. Groups who are at greater risk of vitamin D deficiency should take a daily supplement. They include:

- All babies and young children from birth to 4 years. Babies who are fed infant formula will not need vitamin drops unless they are drinking less than 500 ml of formula milk a day, as these products are fortified with vitamin D.
- Pregnant and breastfeeding women.
- People who are not exposed to much sunlight, including those who are housebound or stay indoors for long periods, those in an institution such as a care home, and those who cover their skin for cultural reasons.
- People who have darker skin and therefore need to spend longer in the sun to produce vitamin D.

If you are at greater risk of vitamin D deficiency, you can make a difference to your health by taking a daily supplement.

In addition to those most at risk, everyone aged 5 years and over should consider taking a daily supplement of vitamin D, particularly during the winter months (October to March).

Further advice is available on vitamin D supplements for babies at www.gov.scot/publications/vitamin-d-advice-for-all-age-groups Babies and children from birth until 4 years should be given 10 micrograms (ug) a day. Breastfed babies should be given a daily supplement. Babies who are fed infant formula will not need vitamin drops unless they are drinking less than 500 ml of formula milk a day. Adults and children aged 5 years and over who are at risk of vitamin D deficiency should take 10 ug of vitamin D every day.

How do I get vitamin D supplements?

Healthy Start vitamins, which contain vitamin D, are available free to all pregnant women in Scotland. Ask your midwife or health visitor for further information.

Breastfeeding women and children up to 12 months can get free vitamin D supplements. Please contact your health visitor or family nurse for more information.



Vitamin supplements are also available to buy. Pregnant women should avoid multivitamins containing vitamin A (retinol), as this can cause birth defects. There are multivitamin supplements available that are specifically formulated for pregnant women that exclude vitamin A. Ask your pharmacist about appropriate vitamin D supplements for you and your child.

For adults, single vitamin D supplements are available to buy in most supermarkets and pharmacies.

For older adults, vitamin D with added calcium may be recommended by healthcare staff to protect against osteoporosis.

If you are not sure whether you are at risk or not, or do not know which supplements to take, ask your GP, pharmacist, midwife or health visitor for further information.

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