

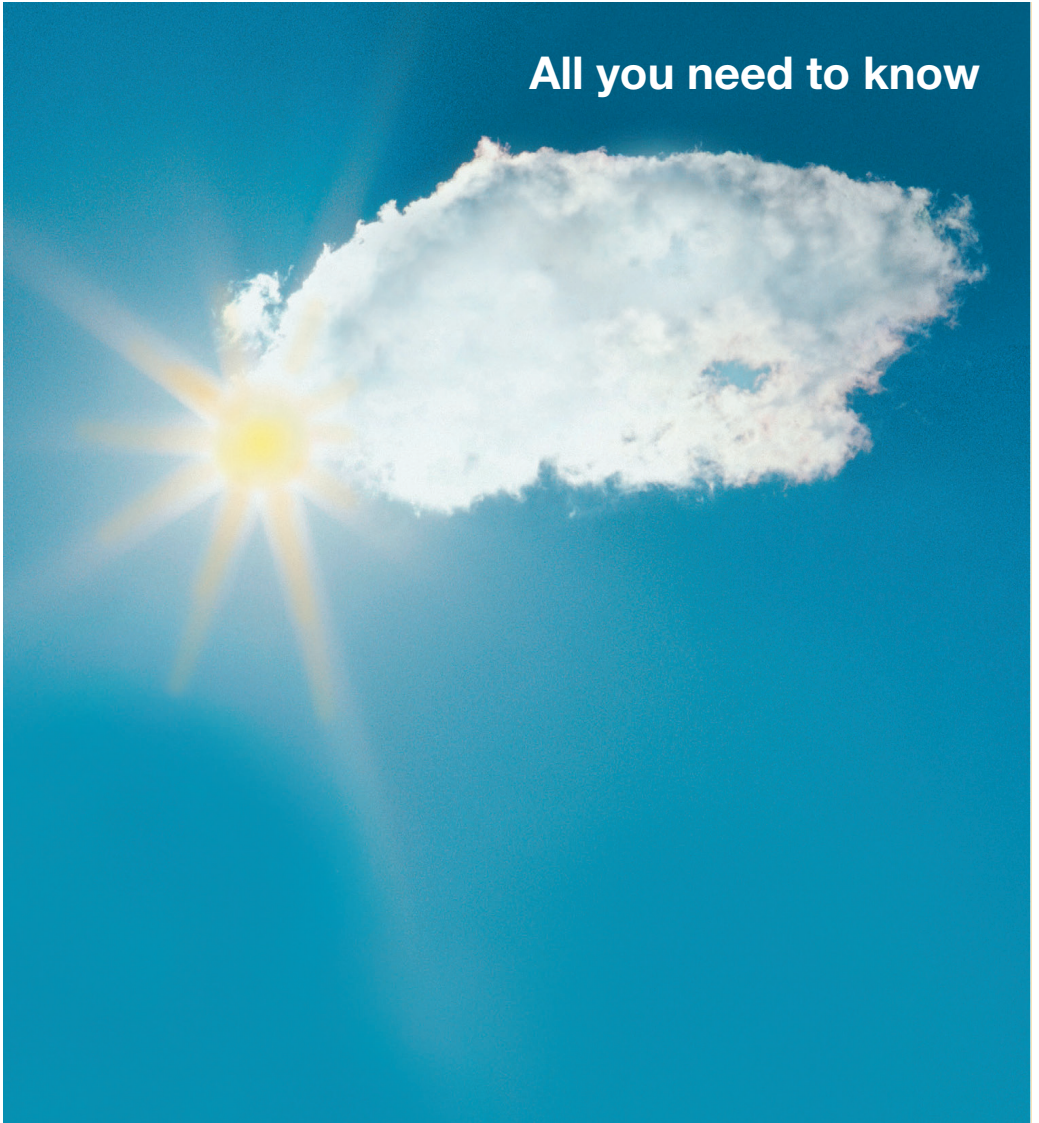


Public Health
England

Protecting and improving
the nation's health

Vitamin D

All you need to know



Why is vitamin D important?

Throughout our lives, we need vitamin D to keep our bones and teeth healthy. It helps our bodies to absorb calcium.

Vitamin D is important for pregnant and breastfeeding women, babies and children under 5 years, older people, people with darker skin and those not exposed to much sun.

Vitamin D is particularly important for pregnant women, to help keep their bones healthy and so that their babies are born with enough vitamin D in their bodies for the first few months of life.

Without enough vitamin D children can be at risk of developing rickets, which causes weak and badly formed bones.

In adulthood and later life, not getting enough vitamin D can lead to osteomalacia (softening of the bones).



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

How do we get vitamin D?

We get most of our vitamin D from sunlight. We also get some from food.

From sunlight


Our bodies make vitamin D when our skin is exposed to summer sunlight so during the winter months it can be particularly difficult to get enough.

The amount of time you need in the sun to make enough vitamin D is different for everyone. Most people will make enough vitamin D if they have a short daily period of sun exposure without sunscreen during the summer months (April to October), mostly between 11 am and 3 pm.

You should always take care to cover up or apply sunscreen before any exposed skin becomes red or begins to burn.

During the winter, we get vitamin D from our body's stores and from food sources.

Sunbeds are not a recommended source of vitamin D.



**We get most
of our vitamin D
from sunlight**

REMEMBER: The longer you stay in the sun, especially for long periods without sun protection, the greater the risk of **skin cancer**. So remember to cover up or protect your skin before you start to turn red or burn. For most of the time you spend outside, stay covered up and use sunscreen with a sun protection factor (SPF) of at least 15.

From food

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

- oily fish such as salmon, mackerel, trout and sardines
- eggs
- meat

Some foods, such as some breakfast cereals, soya products, some dairy products, powdered milks and fat spreads, have vitamin D added to them. The amounts added to these products can vary and it can often be only in small amounts.

Manufacturers have to add vitamin D to infant formula milk.



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

Who is at risk of vitamin D deficiency?

Some people in England have low vitamin D levels, and several groups are at greater risk of deficiency. These include:

- pregnant and breastfeeding women
- children under 5 years of age
- people aged 65 and over
- people who are not exposed to much sun; for example, those who cover their skin for cultural reasons, are housebound or who stay indoors for long periods

If you are in one of these at-risk groups, you can make a positive difference to your health by taking a daily vitamin D supplement.

In the UK it is recommended that:

- **children aged between 6 months and 5 years take between 7 and 8.5 micrograms (µg) of vitamin D a day**
- **adults in one of the groups at risk of vitamin D deficiency take 10 micrograms (µg) of vitamin D a day**

Babies who are fed infant formula should not need a vitamin D supplement until they are having less than 500 ml (about a pint) of infant formula a day as these products are fortified with vitamin D.

People who have darker skin, such as people of African, African–Caribbean and South Asian origin, are also at risk of vitamin D deficiency because it takes their skin a longer time to produce as much vitamin D as it does for someone with lighter skin.

**Some people
should take
vitamin D
supplements**

How do I get vitamin D supplements?

If you are pregnant or breastfeeding or have a child under 5 years of age and are eligible for Healthy Start, you can get vitamin supplements, that contain vitamin D, free of charge. Ask your health visitor for further information.

HEALTHY
START

Visit www.healthystart.nhs.uk or ask a health professional for more information.



You can also buy single vitamin supplements or vitamin drops containing vitamin D for babies and young children at most pharmacies and larger supermarkets. Ask your pharmacist which supplement would be appropriate for you or your child.

If you are not sure whether you are at risk of vitamin D deficiency, or don't know which supplements to take, speak to your pharmacist, GP, midwife or health visitor.

For more information about vitamin D and healthy eating advice see www.nhs.uk.

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
www.gov.uk/phe
Twitter: @PHE_uk

PHE publications gateway number: 2014519

December 2014

© Crown copyright 2014

The information in this leaflet is based on a NHS Health Scotland
Vitamin D and You leaflet.



You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit OGL or email psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.