

## Who is at risk of vitamin D deficiency?

Some people in England have low levels of vitamin D and certain groups of people are at risk of not being able to make enough vitamin D. These people include:

- Pregnant and breastfeeding women
- Children under five years of age
- People over 65 years of age
- People who are not exposed to much sun; e.g. those who cover their skin for cultural reasons or those that are housebound.
- African, African-Caribbean and South Asian people

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

## How do I get vitamin D supplements?

If you are pregnant or breastfeeding or have a child under five years old and are eligible for Healthy Start, you can get vitamin supplements free of charge. Ask your health visitor/midwife for further information.

You can also buy vitamin D supplements from most pharmacies, some supermarkets or health food shops.

## How much do I need to take?

In the UK the Department of Health recommends that:

- Breastfed babies from birth to one year of age should be given a daily supplement containing 8.5 to 10mcg of vitamin D.
- Bottle-fed babies don't need a supplement until they are having less than 500mls a day of formula feed.
- Children aged one to four years old should be given a daily supplement containing 10mcg (400iu) of vitamin D
- At-risk adults take 10 micrograms (400iu) of vitamin D a day all year round.
- All adults take 10 micrograms (400iu) of vitamin D a day during autumn and winter.
- Previously deficient adults take 20 to 25 micrograms (800–1000iu) a day all year round<sup>4</sup>.

**For more information and advice on health and wellbeing visit the NHS Choices website:**

**[www.nhs.uk](http://www.nhs.uk)**

<sup>4</sup> [www.nhs.uk/document.doc?id=1352](http://www.nhs.uk/document.doc?id=1352) [accessed 10.8.16]



*All you need to know*

## Why is vitamin D important?

Vitamin D is essential for healthy bones. It allows our bodies to absorb calcium from food. Without vitamin D we don't absorb enough calcium. This can lead to 'rickets' in children and 'osteomalacia' in adults.

## How do we get vitamin D?

We get 90% of our vitamin D from sunlight and a small amount from the food we eat.

### Vitamin D from the sun

During spring and summer (late March/April to end of September) the majority of people make enough vitamin D from the sunshine<sup>1</sup>.

The exact time needed in the sun is difficult to determine for an individual, but it is important to remember not to burn as this increases your risk of skin cancer.

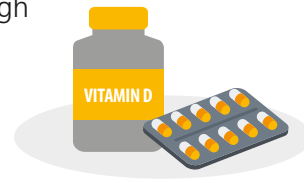
We do not need to sunbathe to make enough vitamin D. Having our arms/lower legs and face in the sun for around 5–10 minutes should be enough, if it's around midday, 2–3 times a week and without sunscreen<sup>2</sup>.

Sunbathing so that skin becomes red or burns will not increase the amount of vitamin D we make. In fact it will do the opposite; vitamin D



will be broken down by too much sun light. For sun exposure longer than this amount of time everyone should use sunscreen before they start to turn red/burn.

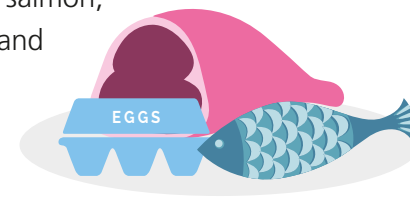
During autumn and winter (October to late March/April) there isn't enough sunlight to be able to make enough vitamin D and so everyone should consider vitamin D supplementation during this time<sup>3</sup>.



### Vitamin D from food

It is very difficult to get enough vitamin D from just our food. However, it can be found in:

- Oily fish such as salmon, mackerel, trout and sardines
- Eggs
- Meat



Certain foods are fortified with vitamin D such as some breakfast cereals, soya products, powdered milks and fat spreads. Manufacturers have to add vitamins to infant formula.

<sup>1</sup> [www.gov.uk/government/news/phe-publishes-new-advice-on-vitamin-d](http://www.gov.uk/government/news/phe-publishes-new-advice-on-vitamin-d) [accessed 10.8.16]

<sup>2</sup> [www.nhs.uk/Livewell/Summerhealth/Pages/vitamin-D-sunlight.aspx](http://www.nhs.uk/Livewell/Summerhealth/Pages/vitamin-D-sunlight.aspx) [accessed 10.8.16]

<sup>3</sup> [www.gov.uk/government/news/phe-publishes-new-advice-on-vitamin-d](http://www.gov.uk/government/news/phe-publishes-new-advice-on-vitamin-d) [accessed 10.8.16]