

# Vitamin D and COVID-19



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## KEY MESSAGES

- Vitamin D is essential for healthy bones, teeth and muscles and it helps us to absorb calcium where we need it
- We rely on the sun for vitamin D; even if we eat a healthy, balanced diet we may not get enough vitamin D from our food intake alone
- A daily supplement is recommended for certain groups, including the very young and over 65s, and those with darker skin
- Those shielding or isolating at home during the COVID-19 pandemic should consider taking a daily supplement (10µg (440iu) per day)
- There have been some news reports about vitamin D reducing the risk of coronavirus. However, there is no evidence to support this

## Vitamin D and COVID-19:

With many people shielding and isolating during the COVID-19 pandemic, more people will be at risk of vitamin D deficiency and find themselves placed temporarily into the higher risk category. Individuals who can't spend time outside during this time should take a vitamin D supplement. There have been some news reports about vitamin D reducing the risk of coronavirus. However, there is no evidence to support this.

### About vitamin D:

The majority of our vitamin D comes from sunshine, not food. When we spend time in the sun, ultraviolet light allows our skin to make vitamin D. Some food sources contain vitamin D, but even the healthiest and well-balanced diet is unlikely to provide enough.

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

Babies and children who do not get enough vitamin D can develop rickets. If left untreated rickets can cause permanent deformities to the bone, weaken muscles and lead to reduced growth.

In adults, lack of vitamin D can lead to osteomalacia – a weakening of the bones. This can be painful and lead to falls increasing the

risk of accessing healthcare services.

### How do we get vitamin D from the sun?

The amount of vitamin D the body makes depends on the strength of the sun – if you spend time in the strong sun in the middle of the day. Your body will make more vitamin D than on a cloudy day, or when the sun is weaker (either earlier or later in the day).

In the UK, the sun is only strong enough to make vitamin D from April to September; the sun must be on exposed skin (normally the hands, face, arms, legs). It is important to practice sun safety and to protect the skin from sun damage before it gets red or burnt. During the COVID-19 pandemic people may be getting less exposure to the sun than normal as activities outside are limited; some may have little/no access to sunlight at home due if they are shielding or isolating and live in a property without a garden or balcony.

In the Autumn and Winter when the sun is weaker, we get our vitamin D from our body's stores and from food sources, however these are unlikely to provide enough vitamin D. The only way to ensure sufficient vitamin D at this time is to take a supplement.

## Who is at risk of low Vitamin D intake?

- babies, children and adolescents who spend little time playing outside
- pregnant and breastfeeding people
- people over 65 years old because their skin is not as good at making vitamin D
- people with darker skin tones – people of Asian, African, Afro-Caribbean and Middle Eastern descent – living in the UK or other northern climates
- if you always cover most of your skin when you are outside
- anyone who spends very little time outside during the summer – the housebound, those living in institutions, shop/office workers, night shift workers

## Vitamin D supplements:

Vitamin D supplements and multivitamins are available to buy in pharmacies, supermarkets and online. Some people who are pregnant or breastfeeding and children aged six months to four years may qualify for Healthy Start vitamins. Ask your health visitor about this.

A daily supplement only needs to contain 10ug (micrograms) to meet the recommendation - those with a higher content of vitamin D are unnecessary and could be harmful in the long run, so stick to 10ug and do not take more than one supplement containing vitamin D.

## WHICH FOODS CONTAIN VITAMIN D?



- Oily fish such as salmon (10-15µg per 140g serving; sardines (4.6µg per 140g serving) and mackerel (9-12µg per 140g serving)



- Cod liver oil also contains a lot of Vitamin D, but don't take this if you are pregnant



- Egg yolks contains approximately 1.6µg per egg



- Lamb contains approximately 0.4µg per 90g of meat



- Chicken contains approximately 0.2µg per 100g of meat

- Offal contains approximately 0.3µg per 100g of meat, but varies during the seasons

*Margarine, some breakfast cereals, infant formula milk, orange juice and some yoghurts have some added vitamin D.*

It is not harmful to eat a vitamin D rich diet, spend time in the sun and take a 10-microgram daily supplement. Just be careful with higher doses higher doses of vitamin D (above 10µg) from a supplement as this could cause harm over time.

## SHALL I TAKE A VITAMIN D SUPPLEMENT?

***If you tick any of the below, you should consider taking a 10µg vitamin D supplement daily.***

- If you are unable to spend time outside (this may be due to shielding / isolating during COVID-19, or you do not have access to outdoor space in your home i.e. Garden or balcony)
- A baby, a child or an adolescent who spends little time playing outside
- Pregnant or breastfeeding
- Over 65 years old
- If you have a darker skin tone – people Asian, African, Afro-Caribbean and Middle Eastern decent living in the UK or other northern climates.
- If you always cover most of your skin when you are outside

This information was developed in partnership with Healthy Stadia's sister organisation – **Food Active** – specialising in food, nutrition and healthy weight. For more information about **Food Active**, visit: [www.foodactive.org.uk](http://www.foodactive.org.uk)



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