

VITAMIN D AND COVID-19: what you need to know

FOOD ACTIVE

KEY MESSAGES

- Vitamin D is essential for healthy bones, teeth, muscles and helps us to absorb calcium where we need it.
- We rely on most of our vitamin D from the sun; sufficient levels of vitamin D may not be achieved through food intake alone.
- Adults and children over the age of one are advised to take a daily supplement of 10ug, particularly from October to early March, whilst those at risk should take a supplement all year round.
- It's important to take vitamin D as you may have been indoors more than usual this year i.e. those who have been shielding.
- There have been some reports about vitamin D reducing the risk of coronavirus (COVID-19). But there is currently not enough evidence to support taking vitamin D to prevent or treat coronavirus.

About vitamin D:

The majority of our vitamin D comes from sunshine, instead of food. When we spend time in the sun, ultraviolet light allows our skin to make vitamin D. Some food sources contain small amounts 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 local and national COVID-19 restrictions, people may be getting less exposure to the sun than normal as activities outside may be limited; some may have little/no access to sunlight at home if they are choosing to shield, undergoing a period of isolation and live in a property without a garden or balcony. In Autumn and Winter, the months of October to Early March, 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.

Vitamin D and COVID-19:

Although a number of studies have indicated that poor vitamin D levels are associated with a higher risk of death from COVID-19, currently there is no evidence to support taking vitamin D supplements to prevent or treat COVID-19. However, it is thought that vitamin D may have a role in the body's immune response to respiratory viruses and the Government is said to be finalising a 4-month rollout plan for Vitamin D to be delivered to more than two million clinically vulnerable people across England, including all care home residents. This briefing will be updated as evidence emerges.

Who is at risk of low Vitamin D intake?


- babies and young children, and 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 widely 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 (10-15ug per 140g serving), sardines (4.6ug per 140g serving) and mackerel (9-12ug per 140g serving). Cod liver oil also contains a lot of vitamin D, but don't take this if you are pregnant.




Egg yolks contain approximately 1.6ug per egg



Lamb contains approximately 0.4ug per 90g of meat



Chicken contains approximately 0.2ug per 100g of meat



Offal contains approximately 0.3ug 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 10ug daily supplement - only higher doses of vitamin D (above 10ug) from a supplement could potentially cause harm.

SHOULD I TAKE A VITAMIN D SUPPLEMENT?

If you tick any of the below, you should consider taking a 10ug Vitamin D supplement daily.

- If you are unable to spend time outside (this may be due to shielding / isolating during Covid-19/not having access to outdoor space in your home i.e. garden or balcony)
- Baby, a young child or a child or adolescents who spends little time playing outside
- Pregnant or breastfeeding
- Over 65 years old
- If you have a darker skin tone – people of 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