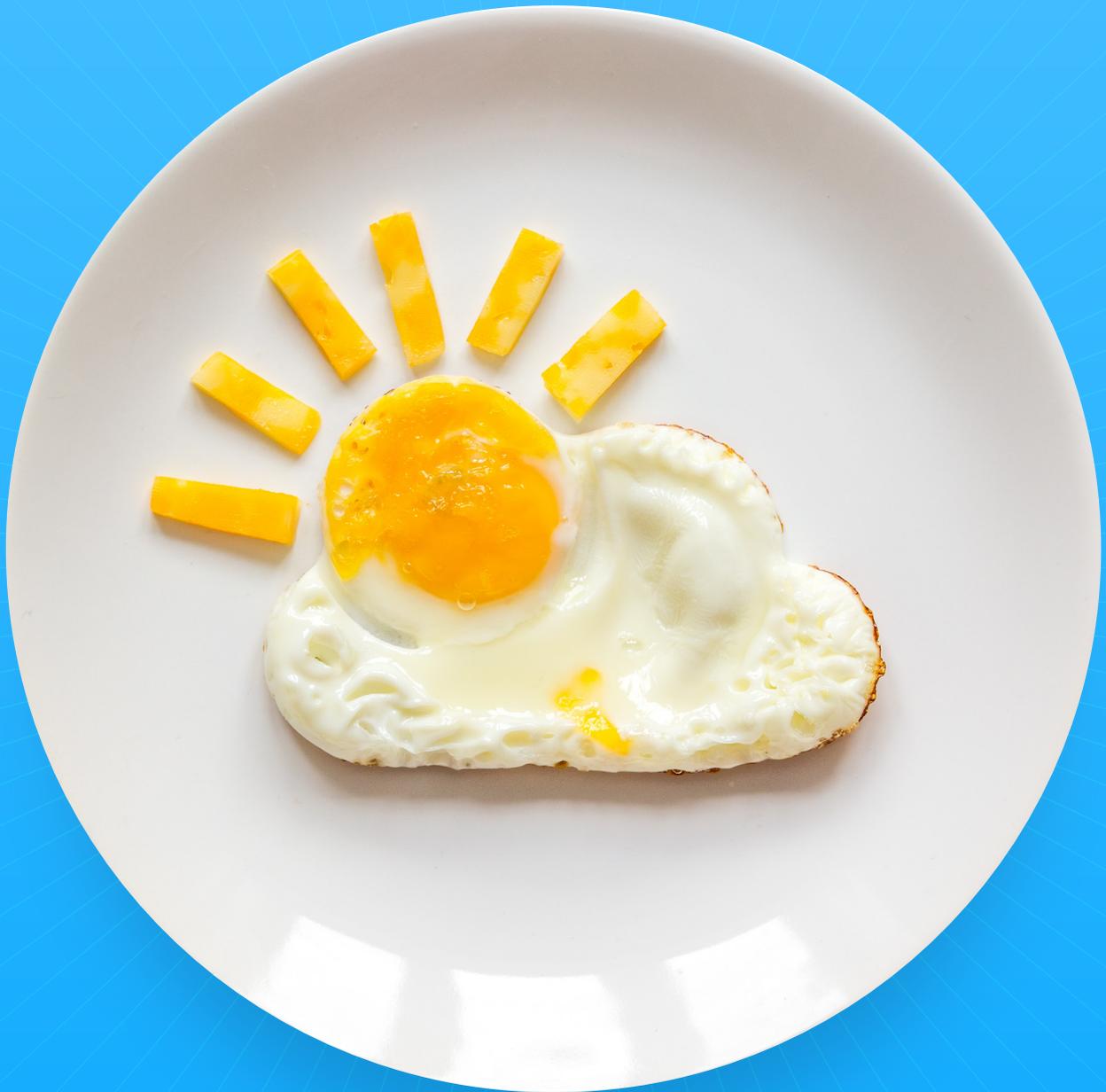


VEGETOLOGY
Science harnessing nature



How to get more

VITAMIN D

in your diet

How to get more

V TAM IN D

in your diet

We all need Vitamin D. It's an essential. For bones, muscles, brain function – the list goes on.

So it's a bit worrying that Public Health England (the government body who exist to protect public health) said in a report last year, that a lot of us aren't actually getting enough Vitamin D, all year round. You need 10mcg of Vitamin D a day. How do you get enough? Does it mean we need to change our diet? Or are there other reasons?



Why Vitamin D Matters

So, Vitamin D is essential, not only for healthy bones and teeth, as we commonly think of Vitamin D's role being to help absorb calcium and phosphates, but also for muscle growth and strength, a healthy heart, lungs and brain functions and a healthy immune system.

A long term deficiency of Vitamin D can lead to serious health complications or or cause existing conditions to worsen.

But also just not getting quite enough Vitamin D can have a massive effect on our lifestyles. A lack of Vitamin D can cause:

- **Fatigue** – that relentless exhaustion that means you don't go to that social, or do the best you can at your job
- **Low Mood** – maybe things don't have the same shine for you – you have a low mood and lose interest in things
- **Aches and pains** – in your muscles, joints and bones – this can stop you fully participating in all the things you want to through pain.

So why aren't we getting enough Vitamin D? Is it our diet that's the problem - should we be getting more Vitamin D through food sources? Or is it something else?

We first need to look a little bit at how we get Vitamin D.



How We Get Vitamin D

There are two main ways we get Vitamin D – through supplements and through exposure to direct sunlight.



Sunlight

In a clever process that makes it different a lot of vitamins, your body actually produces its own Vitamin D. This happens when your bare skin is exposed to the sun's UVB rays. The problem is, in our climate, we don't get enough concentrate of UVB rays all year round, making it hard to get enough Vitamin D that way.

Supplements

A lot of people take a supplement that contains Vitamin D. This is a way to ensure that you are getting enough Vitamin D. This is advice from Public Health England and the NHS if you think you aren't getting enough Vitamin D.



Well, what about Food Source Vitamin D?

We'll come to that shortly but scientists and medical experts agree that chances are, you won't get enough Vitamin D from your diet, regardless of whether you follow a plant-based diet or not.





Who is most at risk of not getting enough Vitamin D?

Well, to start with, Public Health England say most of us in the UK actually. Because we don't get enough exposure to direct sunlight because of our climate. Also there are some other groups who are more at risk:

People who work indoors – if you have a job in an office, warehouse, school, hospital or any other indoor space, then you are more at risk because you likely spend a large proportion of your time, even in the summer months, inside. Not getting exposure to sunlight! And even if you have lots of windows, UVB rays (the ones that we need to be exposed to) don't travel through glass.

People who have skin covered – if you largely cover your skin for religious or personal reasons, then you won't get the benefit of exposure to natural sunlight as UVB rays also don't penetrate through clothes.

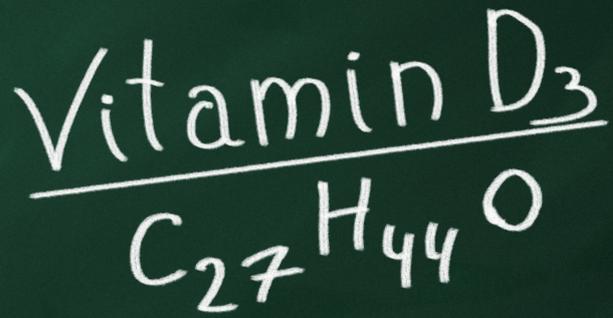
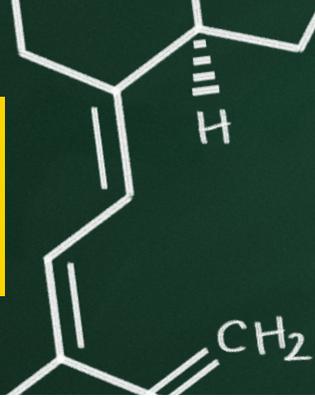
People who always use sunscreen – if you always use sunscreen the whole time you are in the sun then you won't get the benefits of being exposed to direct sunlight, as the point of sunscreen is to block those UVA and UVB rays to protect your skin from their damaging effects. The downside of this is that you don't get any of the benefits either.

People who live in areas of less sunlight – that's most of us in the UK! We don't get enough natural sunlight to get all the vitamin D3 our body needs to be healthy. That's because there's not as much sunlight in our climate, particularly in the winter months.

Older people – as your skin ages it gets thinner, which means it can't produce as much Vitamin D3 naturally as it once could. This means older people are more likely to be at risk of a lack of a Vitamin D3.

Pregnant women – if you are pregnant you will be at a greater risk of developing a Vitamin D3 deficiency.

People with darker skin tones – the darker your skin tone, the more you will need to be exposed to direct sunlight to make as much Vitamin D3 as someone with fairer skin might in a shorter time.



Daily Diet and Vitamin D3 Food Sources

So, we said earlier that medical experts and scientists largely agree that you can't get enough Vitamin D from your diet alone. Why? It's all to do with the type of Vitamin D your body needs.

There are two main types of Vitamin D and one is far more useful than the other. Unfortunately, especially if you don't live in a sunny climate, it's Vitamin D2 we find in most foods, and Vitamin D3 that's the most useful. Why?



Well, Vitamin D3, which you may hear being called calciferol, is the stuff that is produced when our bare skin is exposed to direct sunlight. Calciferol is all ready for our body to take in, metabolise and use. So it's instant goodness.



Whereas, Vitamin D2, which you may hear called ergocalciferol, is like the analogue version of Vitamin D. So, there's a complex process that needs to take place in the body for ergocalciferol to be ready for the body to use. That's why a lot of scientists and medical experts agree that actually Vitamin D2 isn't really that helpful for our body, as it isn't the type we're used to absorbing and utilising.

It's Vitamin D3 we want to get more of. But like we said that's not found often in foods, particularly if you are following a plant-based diet. Although all diets can't get enough Vitamin D3 from diet alone.



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Vitamin

What to Look for In a Plant-Based Vitamin D Supplement

This leads us onto what was traditionally an issue for those following a plant-based diet, and those wanting to choose more ethically and planet-consciously about their lifestyle. The main thing you want to look for is Plant-Based Vitamin D3 not Plant-Based Vitamin D2. That will mean you are getting the most effective form of Plant-Origin Vitamin D.

But most supplements for Vitamin D3 aren't vegan and vegetarian friendly. Why? It's to do with the source of Vitamin D3 in supplements. Vitamin D supplements developed for those on a plant-origin diet have traditionally been with plant-based vitamin D2, which we know isn't as effective. That's why we at Vegetology wanted to change that.

VITAMIN D3 SUPPLEMENTS

There have traditionally been two main sources where Vitamin D3 is derived from for supplements –

- **Lanolin - a waxy substance in sheep's wool**
- **Fish oils**

If you have chosen to follow a plant-based diet, or want to live more ethically, with a view to being more planet friendly, neither of these are really solutions. Lanolin, far from being a natural pure option will likely have been contaminated at some point with sheep dip or pesticides.

That's where Vegetology came in. At Vegetology, we love science. We spend our time researching what our bodies need and the best ways to get those minerals and vitamins, whatever your diet, whilst protecting the planet.



D

Vitamin

Vitamin D from Lichen - A Plant-Based Alternative

At Vegetology, we didn't like the idea of deriving Vitamin D3 from lanolin - we wanted an animal-free, sustainable, eco-friendly, cleaner source. That's when we discovered lichen, a plant-based source of Vitamin D3.

WHAT IS LICHEN?

It's a small unique plant species consisting of a symbiotic association of a fungus with an algae. It's naturally found on mountainsides, rocks and trees in abundance. It's a natural source of Vitamin D3 with no negative effects on the environment. Which we thought was just great!

And not just for those who are following a plant based diet, because lichen isn't just animal-free, it is also a more sustainable way of creating a Vitamin D3 supplement. Because it comes from a plant source, it is arguably a purer source, it isn't contaminated by sheep dip or pesticides. It is easy to grow and naturally occurs in large quantities, so it isn't having a negative effect on the environment, making it a great environmentally conscious choice.

VITASHINE

Once we had found Lichen, which was a 100% vegan, vegetarian, eco-friendly Vitamin D3 alternative

to lanolin, we were able to develop an alternative supplement, Vitashine.

Vitashine is a Vitamin D3 supplement. It's the world's only Vegan and Vegetarian Society registered plant-source ingredient.



With Vitashine you can ensure you are getting enough Vitamin D3 through a supplement that is planet friendly, plant-based and sustainable, and you can choose between tablet form and a spray, which makes it great for all the family.

Understanding that we cannot get enough food-source Vitamin D3 from our diet is the first step to considering taking a Vitamin D3 supplement. We need to consider the lifestyle we have chosen, if we are following a plant-based diet or if we are looking to live in a more sustainable way, with the supplement we choose. Vitashine is a plant-based, planet-friendly alternative source of vitamin D3.

Find out more about Vegetology :