

A woman with long, flowing hair is standing in a field of tall grass at sunset. She is wearing a floral dress and has her arms crossed. Her hair is blowing in the wind, and she has a serene expression. The background is a soft, golden glow from the setting sun.

vitamin
D3V[®]





Veganism on the rise?

- The global market for vegan and vegetarian products was worth \$51 billion in 2016.
- Plant-based food sales grew almost 2.5x faster than total food sales from 2018 – 2020
Demand for meat-free food in the UK increased by 987% in 2017
- Europe was the largest market for plant-based products in 2019, accounting for 39% of global sales.
- 1 in 3 Brits have stopped or reduced their meat consumption.
- Meat substitute sales grew by 451% in the European market in the four years to February 2018
- In 2019, UK overtakes Germany as worlds largest Vegan consumer
- 16% of products launched in the UK had a vegan claim in 2018

Why take Vitamin D3?



- Vitamin D works with calcium to support your **bone**, you need vitamin D to absorb calcium from the food. No vitamin D, your body can't absorb calcium which leads to weaker bone.
- Researchers found that people with more vitamin D had leaner bodies, more **muscle** mass, and muscles that worked better.
- Having too little vitamin D may put you at risk for COVID-19. Vitamin D plays a vital role in your **immune** system which helps protect you from virus and bacteria.
- Researchers have found evidence that raising vitamin D levels helps with symptoms of **depression**.
- Several studies have shown that vitamin D has an impact on disease or disorders caused by **inflammation**.
- A lack of vitamin D increases your chances of **heart** disease, stroke, blood pressure, and heart attacks.

Overview



- Vitamin D3V® is Cholecalciferol (Vitamin D3) of 100% plant-origin, produced from renewable resources.
- It is available in 2 different formats:

Product	Product ID	Packaging
Vitamin D3V® 1miu/g Oil	D3V02	1kg Aluminium Canisters
Vitamin D3V® 100,000iu/g	D3V03	1kg & 5kg Aluminium pouches

What is Vitamin D3V?



- Derived from UK Algal source – Non GMO
- 100% sustainable and scalable.
- Produced as pure crystal Cholecalciferol , meeting the same USP/EP Monographs as animal derived material
- Not like other Vitamin D3 products which a plant enriched D3 extracts
- Direct replacement for standard animal-source Vitamin D3
- No labelling/regulatory changes required
- Independent Expert laboratory analysis
- NMR testing used to ensure on chemically identical to Lanolin D3
- Extensive and Comprehensive stability testing
- Produced at ISO 9001 and ISO 14001 certified FDA facility
- Vegan Society, Kosher and Halal certified

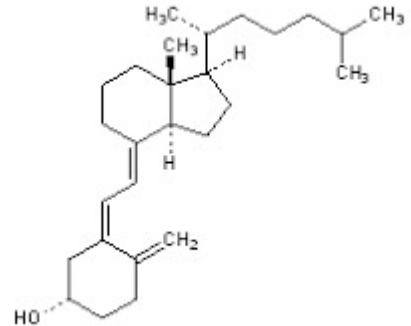
Scale and Sustainability



- Rapid growth profile
 - Completely sustainable
 - Around 8-12 weeks for algal growth
 - Versatility - Cultivated in specialty growing facilities in the UK
- Continued optimization of algal growth
 - Ongoing analysis and review of multiple growing and treatment conditions, to ensure maximise yields
- No waste
 - During the extraction process and once algae is pressed for oils, the remaining dry matter is macerated then used to feed the next batches of algae

Vitamin D3V® versus Lanolin D3

- Vitamin D3V® is of 100% plant-origin, produced from Algae
- Conventional Vitamin D3 is obtained from animal-origin, including Lanolin (sheep wool grease) or animal skin
- **Vitamin D3V® is chemically identical to animal-origin Vitamin D3**
- Purity - no Hexane or harsh chemicals used in extraction of D3V®
- Production process ensures zero residual pesticides or other contaminants



Vitamin D3V® versus Vitamin D2



- Traditionally Vitamin D2 was the only available option as a vegetarian-suitable alternative to Animal Vitamin D3
- It raises your overall vitamin D level higher than D2.
- It lasts longer in the body than D2.
- Studies confirm

“Vitamin D2 should no longer be regarded as a nutrient appropriate for supplementation or fortification of foods”

[American Journal of Clinical Nutrition](#)

Vitamin D3 is approximately 87% more potent than Vitamin D2

[Clinical Journal of endocrinology](#)

Purity / species

- **Intertek** is a leading Total Quality Assurance provider to industries worldwide. Delivers innovative and bespoke Assurance, Testing, Inspection and Certification solutions for our customers' operations and supply chains.
- Complies to EP /USP standards for Cholecalciferol
- 'Natural' Label – meets criteria set out in ISO/TS 19657
 - “*Definitions and technical criteria for food ingredients to be considered natural.*”
- *Species – Not required for labelling, regulatory requirements*
- *Label Examples*
 - ‘*Plant based Vitamin D3 (Cholecalciferol)*’
 - ‘*Algal Vitamin D3*’

Cost in use – low ↓
 Potential RSP – high

- There is an established and accepted ‘feel good premium’ for Vegan claim on pack.
- Below costing based on £500/Kg (100,000iu/g)
- Investment small vs larger potential return

Desired Vitamin D3 Dose	Cost in use per dose	Cost per monthly pack (30 doses)	Vegan premium (30 doses)
200iu	Less than 0.001	Less than £0.03	More than £0.06
400iu	Less than £0.002	Less than £0.06	More than £0.12
1000iu	Less than £0.005	Less than £0.15	More than £0.30

Market examples

