

# Vitamin D supplementation for vegans



**PLANT-BASED**  
Health Professionals UK

Promoting Sustainable Health and Nutrition

## Role of vitamin D

**Vitamin D is required for the regulation of calcium and phosphorus metabolism and is therefore *essential* for the maintenance of musculoskeletal health. Any deficiency could result in bone deformities such as rickets in children and osteomalacia in adults.<sup>1</sup>**

### Sources of vitamin D

The main source of vitamin D is from exposure of the skin to sunlight; however, it can be obtained from foods or dietary supplements, which are essential when there is limited exposure to sunlight (e.g., during the winter months) or exposure is restricted (e.g., due to lack of time spent outdoors or little skin exposure).<sup>1,2</sup>

Many dietary sources of vitamin D (such as oily fish, red meat, liver and egg yolks) are animal-based and therefore not suitable for vegans.<sup>2</sup> However, vitamin D can also be obtained from some mushrooms and fortified foods. Furthermore, many vitamin D supplements are made from animal sources, for example vitamin D3 is often derived from lanolin in sheep's wool fat, although it is possible to obtain vitamin D3 from plant sources such as lichen.<sup>3</sup>

### Current recommendations for vitamin D supplementation

Vitamin D is available as **colecalciferol (vitamin D3)** or **ergocalciferol (vitamin D2)** and intake is expressed in **International Units (IU)** or in **micrograms (µg)**.

One IU of vitamin D is equivalent to 0.025 micrograms of vitamin D and 1 microgram of vitamin D is equivalent to 40 IU.<sup>1</sup>

### The Reference Nutrient Intake

(RNI: the amount required to ensure 97.5% of the population's needs are met) for vitamin D is 10 micrograms/day (400 IU/day).<sup>1</sup>

**In the UK, daily supplement containing 10 micrograms of vitamin D is recommended throughout the year for the following at-risk groups:**

- Those who are frail or housebound and do not get enough sunlight
- Those in an institution (such as a care/nursing home)
- Those with darker skin (i.e. of African, African-Caribbean or South Asian background)
- Those who usually wear clothes that cover up most of their skin whilst outdoors
- Children aged 1 to 4 years old<sup>2</sup>

**A daily supplement containing 8.5 to 10 micrograms of vitamin D is recommended for breastfed babies from birth to 1 year of age.**

Since infant formula milk is fortified with vitamin D, formula-fed babies should not be given a vitamin D supplement until they're having *less than 500ml (about a pint) of infant formula a day*.<sup>2</sup>

**During the months October through March, a daily supplement containing 10 micrograms of vitamin D is recommended for:**

- All adults including the elderly
- Children aged 4 years and upwards
- Pregnant and breastfeeding women<sup>2</sup>

# Vitamin D supplementation for vegans



**PLANT-BASED**  
Health Professionals UK

Promoting Sustainable Health and Nutrition

Page 2

**Taking too many vitamin D supplements over a long period of time can increase the levels of calcium in the body and lead to weakening of the bones and cause damage to the heart and kidneys.<sup>2</sup>**

**The following are considered *safe daily limits* for vitamin D supplementation**

<b>Adults, including the elderly</b>	No more than <b>100 micrograms (4,000 IU)</b> of vitamin D a day
<b>Pregnant and breastfeeding women</b>	No more than <b>100 micrograms (4,000 IU)</b> of vitamin D a day
<b>Children aged 11 to 17 years</b>	No more than <b>100 micrograms (4,000 IU)</b> of vitamin D a day
<b>Children aged 1 to 10 years</b>	No more than <b>50 micrograms (2,000 IU)</b> a day
<b>Infants under 12 months</b>	No more than <b>25 micrograms (1,000 IU)</b> a day

Please see separate [factsheets](#) on pregnancy and raising children and for further information on plant-based food sources of vitamin D on the Plant-Based Health Professionals' website.

## **Vitamin D supplements suitable for vegans**

Suitable vegan sources of vitamin D include **colecalfiferol (vitamin D3)** derived from lichen or **ergocalciferol (vitamin D2)** which is derived from yeast.<sup>3</sup>

Colecalciferol may be slightly more effective than ergocalciferol.<sup>4</sup> If you have the choice, choose vegan D3 over D2.

Other issues that need to be considered include excipients such as magnesium stearate which can be produced from either a vegetable or animal source, and is used in production of some tablets / powders to aid delivery.<sup>5</sup>



# Vitamin D supplementation for vegans



**PLANT-BASED**  
Health Professionals UK

Promoting Sustainable Health and Nutrition

## Page 3

The following table lists vitamin D supplements that are suitable for vegans and can be purchased from community pharmacies, health food shops or internet retailers.

Most of these are marketed as nutritional supplements therefore they are not subject to the same regulatory controls as vitamin D that is a licensed medicinal product.

**Note:** Manufacturers alter the contents of their products so they should be consulted to assure that their products are still suitable for vegans. This document should therefore not be used as a sole resource.

Vitamin D supplement: name, strength, formulation	Manufacturer*
Contains ergocalciferol (D2)	
<b>Eciferol D2</b> capsules: 50,000 IU liquid: 3000 IU/mL	Rhodes Pharma
<b>Ergo-D2</b> tablets: 500 IU	Ennogen
<b>Ergoral D2</b> tablets: 10,000 IU	Cubic Pharmaceuticals Ltd
<b>Health Aid Vitamin D</b> tablets: 500 IU	Health Aid Ltd
Contains colecalciferol (D3)	
<b>Holland and Barrett Vegan D3</b> capsules: 1000IU, 3000IU Effervescent Tablets: 1000IU Baby Liquid Drops: 400IU/0.06ml	Holland and Barrett
<b>Lamberts Vitamin D3 Vegan</b> capsules: 1000 IU	Lamberts Healthcare Ltd
<b>SunVit D3 Vegan</b> tablets: 400 IU, 800IU, 1000 IU	SunVit
<b>Pro D3 Vegan</b> liquid: 2000 IU/mL drops: 400 IU/4 drops capsules: 800 IU, 3200 IU & 20,000 IU	Synergy Biologics
<b>Boots Pharmaceuticals Vegan vitamin D3</b> tablets: 1000 IU	Boots Pharmaceuticals
<b>Natures Aid Vitamin Vegan</b> tablets: 1000 IU <b>Vitamin D3</b> oral drops: 2500 IU/0.5mL	Natures Aid

The Vegan Society markets a daily vitamin and mineral supplement designed for vegans called VEG 1, which provides 800IU of vitamin D3 along with other nutrients e.g. vitamins B12, iodine and selenium.<sup>3</sup>

## References

1. Vitamin D and health 2016: Scientific Advisory Committee Nutrition: Available at: [Vitamin D and health](#)
2. Vitamin D. NHS Conditions. Accessed online via: [NHS Vitamin D](#)
3. Vitamin D: The Vegan Society: Accessed online via: [Why do we need vitamin D in our diets?](#)

4. Vitamin D (October 2025). Royal Osteoporosis Society. Available at: [Vitamin D Supplements and Tests](#).

5. Is my medication vegan? October 2017: The Vegan Society: Accessed online via: [Is my medication vegan?](#)

\* Personal communication