

Vega Vitamin D



Vitamin D recommendations

The UK government now recommends that EVERYBODY in the UK takes a vitamin D supplement daily during the autumn and winter months

‘Everyone over one year of age should consume 10 micrograms of vitamin D daily...[and]...all babies from birth up to one year of age should consume 8.5 to 10 micrograms of vitamin D per day’.

Some groups should consider taking a vitamin D supplement all year round - including ethnic minorities, elderly or institutionalised people and people who cover their skin for cultural reasons or who work long hours indoors

- UK recommendations from the SACN (Scientific Advisory Committee on Nutrition) based upon evidence looked at over the last five years.
- Followed up by PHE (Public Health England) – the agency for the Department of Health, which provides advice to the general public and the NHS



Why vitamin D?

- Vitamin D regulates the amount of calcium and phosphate in the body – both are needed for healthy bones, teeth and muscles
- Vitamin D also contributes to the normal function of the immune system
- Levels of vitamin D less than 25nmol/L are considered to be inadequate, leading to greater risk of vitamin D-related disease (rickets, osteoporosis, fractures and falls)
- Increased number of cases of rickets amongst children in the UK in recent years
- 30-40% of the entire UK population have inadequate levels of vitamin D during winter (an estimate that is supported by experts and research worldwide)
- 16% of adults in London have inadequate levels all year round

Lifestyle > Health & Families > Health News

Chief Medical Officer 'ashamed' as rickets makes a comeback

40 per cent of English children have some kind of vitamin D deficiency



Sources of vitamin D

Vitamin D from sun, food and supplements goes through two chemical processes:

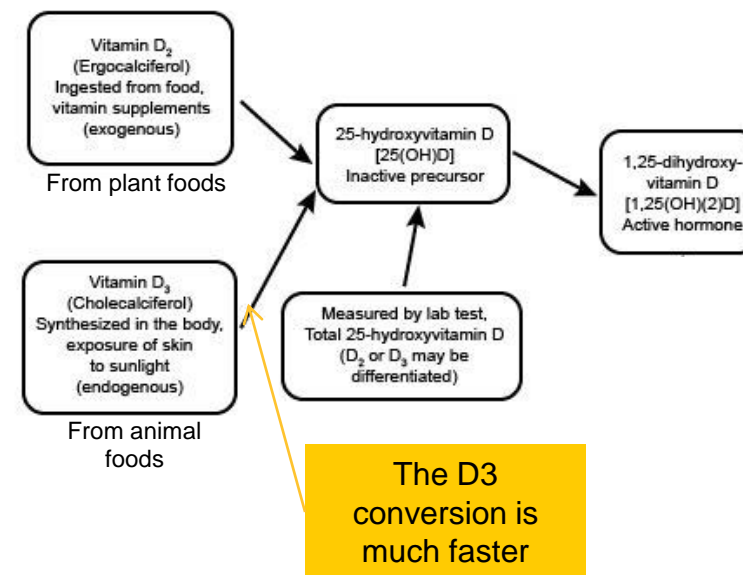
1. Converted to 25-hydroxyvitamin D (calcidiol) in the liver
2. Converted to the active 1,25-dihydroxyvitamin D (calcitriol) in the kidney

Hepatic conversion of vitamin D3 is much faster than the conversion of D2

- We get most of our vitamin D from the action of sunshine on the skin

BUT...

- Our face, neck and arms must be exposed to generate enough vitamin D
- Vitamin D is produced from UVB rays, which cannot penetrate cloud or pollution
- Winter months in the UK and most of the northern hemisphere – no sun, cloud cover, everybody indoors, wrapped up warm when outdoors
- Other factors affecting production of vitamin D from sunshine include age, obesity, darker skin, being housebound – and we now avoid the sun



Sources of vitamin D?

- Three quarters of adults think they can get all their required vitamin D from food
- BUT - very few foods contain vitamin D naturally
- We would have to eat 10-12 eggs or 5kg of mushrooms or drink 40 litres of semi-skimmed milk every day to consume 10µg c



HENCE THE UK GOVERNMENT RECOMMENDING SUPPLEMENTATION

BUT...

- 80% of UK adults don't know that the government now advises that everyone of all ages take a vitamin D supplement every day
- 79% don't take a vitamin D supplement – despite half of adults being concerned they are deficient
- 90% of parents don't give their children a vitamin D supplement – only 10% do!

How much vitamin D?

- Vitamin D in food/supplements measured in International Units (IU) or micrograms (μg) – $40\text{IU}=1\mu\text{g}$
- Concentration of activated vitamin D (calcidiol) in blood is the best indicator of an individual's vitamin D status – measured in nanomoles per litre in the UK (nmol/L)

	Men	Women
Average UK daily intake from food	3.7 μg	2.8 μg
UK/EU RNI	5 μg	5 μg
UK NHS recommendations July 2016	10 μg	10 μg
USA RDA up to 70 years of age	15 μg	15 μg
USA RDA over 70	20 μg	20 μg
Optimum recommended daily supplement level based on leading expert research	Winter: Summer:	62.5 μg 20 μg
Existing Irish RDA amounts (currently under review)	0-12 months: Children/Adults:	5 μg 10 μg

Note: Vitamin D is fat soluble so is retained by the body and it is possible to take too much. According to the US Institute of Medicine, 4000 IU is the safe upper level of daily vitamin D intake. However, doses up to 10,000 IU have not been shown to cause toxicity in healthy individuals.

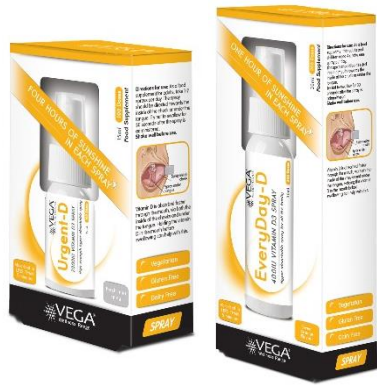
Brand new vitamin D range

Using the latest technology and research to provide vitamin D products to support the whole family throughout the winter months



- Two spray products – Everyday-D 400IU (10µg) and Urgent-D 2000IU (50µg) – for easy use and fast absorption
- Two blackcurrant-flavoured chewable tablet products – Everyday-D 400IU (10µg) and Urgent-D 2000IU (50µg)
- Baby drops - Infant-D – developed specially for babies and toddlers aged 0-3 years
- Vitamin D3 (cholecalciferol) – the natural form we make in response to sunlight and not the artificial D2 form, which is less well utilised by the body
- All vegetarian, gluten free and dairy free

VEGA vitamin D sprays



Two spray products using unique technology patented by Medlab Australia, shown to be hyper-absorbable and to be absorbed into the bloodstream in less than 4 minutes

EveryDay-D 400IU (10µg) per spray – 30ml /200 doses per bottle – orange-flavoured - for the whole family

Urgent-D 2000IU (50µg) per spray – 15ml /100 doses per bottle – mint-flavoured - for adults who require a higher dose

One-spray-a-day into the cheek for ease of use

'From our studies we have found that the Vega oral spray is hyper absorbable and that vitamin D appears in the blood stream in less than four minutes, and maybe even as quickly as one minute after application. We also found that once in the bloodstream, the vitamin D appears to be deployed into virtually all tissues extremely rapidly, particularly in individuals who may be insufficient in their blood vitamin D levels'

Dr Luis Vitetta, Adjunct Professor at University of Sydney Medical School

VEGA vitamin D chewable tablets

EveryDay-D 400IU (10µg) per chewable tablet – 100 and 500 tablet bottles – for the whole family

Urgent-D 2000IU (50µg) per tablet – 60 tablets – for adults who require a higher dose

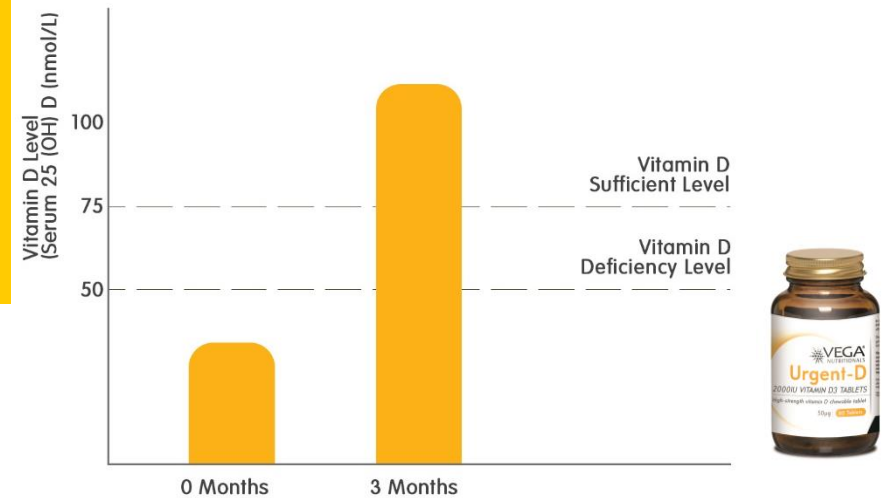
Blackcurrant-flavoured

One-a-day for ease of use



EveryDay-D 500
chewable tablets will
provide the 10µg UK
NRV for a family of
four for more than
four months

Urgent-D chewable tablets have been shown in published clinical studies to completely resolve deficiency in vitamin D deficient adults



The VINDICATE Study: Witte et al (2016)
J.American College of Cardiology



Vega Infant-D drops

Easy-to-administer, flavourless vitamin D drops designed specifically for babies and toddlers



- 400IU (10µg) per drop – the recommended daily dose for babies from birth
- Flavourless to easily drop into the mouth or add to food or drink
- Vegetarian, gluten free and dairy free

VEGA vitamin D range - summary

Product	Format	Dosage	Size	Benefit
EveryDay-D	Chewable tablets	10µg	100 / 500 tablets	Taste / easy to take
EveryDay-D	Spray	10µg	30ml / 200 doses	Absorbed quickly / taste
Infant-D	Drops	10µg	7.5ml / 200 doses	Easily administered
Urgent-D	Chewable tablets	50µg	60 tablets	Supported by research
Urgent-D	Spray	50µg	15ml / 100 doses	Absorbed quickly / taste

