

Vitamin D

Why it's important

Vitamin D keeps our bones healthy by helping to control the amount of calcium and phosphate in our bodies. It also appears to keep our muscles healthy too. Vitamin D can be made by exposing our skin to sunlight during the spring and summer. However, some degree of dietary supplementation is now recommended for everyone in the UK to ensure that we are getting enough of it.

Recommended intakes

The Scientific Advisory Committee on Nutrition has recommended the following intakes of vitamin D for people in the UK¹:

Group	Vitamin D recommendation
Infants less than 1 year old	Safe intake of 8.5-10mcg (micrograms) per day
Children 1-3 years old	Safe intake of 10mcg per day
People aged 4+ years	Reference nutrient intake of 10mcg per day

Public health authorities in England, Northern Ireland and Scotland have provided the following advice about vitamin D supplementation^{2,3,4}:

Group	Provide/use vitamin D drops/supplement
People aged 5+ years	Supplement during autumn and winter, but you might choose not to use one during spring and summer
Pregnant and breastfeeding women	Yes
Breastfed babies	Yes*
Formula-fed infants having less than 500ml per day	Yes
Children 1-4 years old	Yes
People who do not expose their skin to sunlight regularly	Yes
People with darker skin	Yes

*In Scotland, yes for infants 6 months to 1 year old (advice for infants from birth to 6 months of age currently under review)

Sources of vitamin D

If you choose to boost your level of vitamin D by exposing your skin to sunlight during spring and summer, make sure that it does not burn. Aim to spend short periods exposing your skin to sunlight daily, particularly between 11am and 3pm.

It is difficult for anyone to get a daily vitamin D intake of 10mcg from food¹. When choosing a supplement, be aware that some types of vitamin D are not vegan-friendly. Vitamin D2 is always suitable for vegans, but vitamin D3 can be derived from lanolin (from sheep's wool) or lichen (a vegan-friendly source).

Please note that too much vitamin D can be harmful. Infants less than one year old should not have more than 25mcg per day, children aged 1-10 years should not have more than 50mcg per day, and people aged 11 years and above should avoid taking more than 100mcg per day.

Summary

- Check the table above and national advice – when do you need to use a vitamin D supplement?
- Vitamin D3 from lichen and vitamin D2 are vegan-friendly
- Please talk to a health professional about supplements to ensure that they are suitable for you or your child

References

1. SCIENTIFIC ADVISORY COMMITTEE ON NUTRITION (2016) *Vitamin D and Health* available from: <https://www.gov.uk/government/publications/sacn-vitamin-d-and-health-report> (viewed 01-AUG-2016)
2. PUBLIC HEALTH ENGLAND (2016) *PHE publishes new advice on vitamin D* available from: <https://www.gov.uk/government/news/phe-publishes-new-advice-on-vitamin-d> (viewed 02-AUG-2016)
3. PUBLIC HEALTH AGENCY (2017) *Vitamin D and you* available from: <http://www.publichealth.hscni.net/publications/vitamin-d-and-you-0> (viewed 24-FEB-2017)
4. SCOTTISH GOVERNMENT (2016) *Vitamin D* available from: <http://www.gov.scot/Topics/Health/Healthy-Living/Food-Health/vitaminD> (viewed 24-FEB-2017)

