Calcium

Why is calcium important?

Calcium is an essential mineral vital for building strong, healthy bones and teeth.

Beyond its structural role, calcium regulates cell metabolism, acts as a neurotransmitter in cellular communication, supports muscle contraction and helps to control blood clotting[1].

Some initial evidence also suggests that adequate calcium intake may help protect against the development of colorectal cancer, due to its interaction with the intestinal lining[2].

How much calcium do I need?

Calcium requirements vary throughout life. In the UK, the recommended daily calcium intake is as follows*[1,3]

Stage of life	Recommended daily intake (mg)	
0-12 months	525	
1-3 years	350	
4-6 years	450	
7-10 years	550	
11-17 years	Male 1000	Female 800
18-55	700	
All adults >55 years	1200	
Breastfeeding	1200	
Post-menopause	1200	

**People with certain medical conditions that affect nutrient absorption, such as coeliac disease, inflammatory bowel disease, or other malabsorptive bowel conditions, as well as those diagnosed with osteoporosis, may require a higher daily intake of calcium[1].*

For more details on calcium requirements during childhood, pregnancy, breastfeeding, menopause and older adulthood, visit our **life stages** pages.

How to get enough calcium on a vegan diet

There are plenty of plant-based foods and drinks that contain calcium, so it shouldn't be too difficult to meet your needs when following a varied and balanced vegan diet.

Calcium-rich foods include calcium-fortified foods, such as plant-based dairy alternatives, calcium-set tofu and calcium-fortified bread and cereals. Other valuable vegan calcium sources include green leafy vegetables like kale and watercress, as well as almonds, sesame seeds, okra, white beans and dried figs[4,5].

Shopping tips: The calcium content in fortified products varies, so choose plant-based milk alternatives that provide around 120mg of calcium per 100ml. Tofu is a good calcium source only if set with calcium chloride (E509) or calcium sulphate (E516); always check the ingredients label.

Calcium absorption

Calcium absorption can be hindered by dietary compounds such as oxalates and phytates found in many plant-based foods. Knowing which plant foods have higher calcium bioavailability is important for ensuring adequate calcium intake.[6,7]

Absorbability	Plant-based food
Good	Fortified foods, calcium-set tofu, low oxalate leafy green vegetables (for example: kale, pak choi, watercress)
Fair	Almonds, sesame seeds, pinto beans
Poor	Spinach, rhubard

For adults aged 18-55, it's generally recommended to eat two to three portions of calcium-rich foods that are well absorbed each day to meet your calcium needs. Foods with lower calcium absorption can add extra calcium but shouldn't be your main sources.

It is also important to get enough vitamin D, as this essential nutrient supports calcium absorption. For more details, see our **vitamin D guidelines**.

You can further support your calcium absorption from food by avoiding 'calcium thieves' at mealtimes, such as salt, caffeine and alcohol.

Do I need a calcium supplement?

Most vegans can meet their calcium needs by eating a varied and balanced diet. However, if you don't regularly include calcium-rich foods or have higher calcium needs

that are hard to meet through diet alone, a healthcare professional may recommend a calcium supplement to boost your intake.

Speak to a health professional if you have concerns about your calcium intake or bone health. A deficiency can negatively impact your overall health and, in severe cases, lead to rickets in children or **osteoporosis** in adults. Ensuring adequate calcium levels through a healthy diet or dietary supplements is crucial for maintaining bone strength and general wellbeing.

Calcium tips to take away

- Ensure your daily diet includes good sources of well-absorbed calcium, such as fortified plant-based milk and yoghurt alternatives, calcium-set tofu and fortified bread or cereals.
- Other useful plant-based sources that can contribute towards good calcium intake include kale, watercress, tahini, haricot beans, almonds, dried figs and okra.
- Follow our vitamin D guidelines to optimise calcium absorption.

Further information

You might be interested in exploring the following resources:

- **Vitamin D** – essential for enhancing calcium absorption and supporting bone health.
- **Bone health** – practical diet and lifestyle tips to maintain strong, healthy bones.
- **Life stages** – guidance on calcium needs during pregnancy, breastfeeding and various age groups.
- **Nutrition overview** – comprehensive information to help you maintain a balanced and varied diet.

References

1. British Dietetic Association. *Calcium.* https://www.bda.uk.com/resource/calcium.html 2026 (accessed 29 June 2026)
2. Papier K, Bradbury K E et al., 2025. Diet-wide analyses for risk of colorectal cancer: prospective study of 12,251 incident cases among 542,778 women in the UK. *Nature Communications* https://www.nature.com/articles/s41467-024-55219-5 (accessed 29 June 2026)
3. Committee on Medical Aspects of Food and Nutrition. *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom* London: HMSO; 1991
4. Public Health England. *Composition of foods integrated dataset (CoFID)* **www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid** (accessed 29 June 2026)
5. United States Department of Agriculture. *FoodData Central* **https://fdc.nal.usda.gov/** (accessed 29 June 2026)
6. Buchowski, MS. Calcium in the Context of Dietary Sources and Metabolism. In Preedy VR (ed.) *Calcium: Chemistry, Analysis, Function and Effects.* Cambridge: Royal Society of Chemistry; 2015
7. British Dietetic Association. One Blue Dot Nutritional considerations: Calcium. 2020. https://www.bda.uk.com/static/cd197c4c-d35d-40ea-8e169ac6276ac574/Practical-guide-nutritional-considerations-re-CALCIUM.pdf (accessed 29 June 2026)