

Calcium and Vitamin D

Why do we need calcium and vitamin D?

Calcium is essential for healthy bones and teeth. We need vitamin D to help absorb calcium from our food. Vitamin D is known as the 'sunshine vitamin' as it can be made in the body if our skin is exposed to natural sunlight, however research now suggests that we may not make enough vitamin D this way. Rickets is a severe form of vitamin D deficiency where a child's bones become soft, weak and out of shape.

How much calcium and vitamin D do we need?

Most of us will get all the vitamin D we need by eating a healthy balanced diet and from the sun during summer months.

Infants and children need calcium from their diet as follows:

- 0-1 year 525mg calcium per day
- 1-10 years 800mg calcium per day
- 10-17 years 1200mg calcium per day



What are the best sources of calcium?

Milk and dairy products will contain the most calcium per serving, and the calcium in these foods is easily absorbed. As the amount of calcium will vary in different brands, you should check food labels to find out the exact amount of calcium that each food contains. As a guide, the following foods all contain calcium:

Food item	Serving size	Average calcium	Food item	Serving size	Average calcium
Full fat milk	200ml	240mg	Rice pudding	200g	180mg
Low fat milk	200ml	250mg	Tinned sardines (with bones)	100g	460mg
Fortified full fat milk	200ml	320mg	Tinned salmon (with bones)	100g	100mg
Fortified low fat milk	200ml	320mg	Almonds	50g	120mg
Skimmed milk	200ml	250mg	Dried figs	60g (3)	140mg
Fortified soya milk	200ml	240mg	Calcium-enriched orange juice	100ml	120mg
Almond milk	200ml	240mg	Baked beans	200g (small tin)	80mg
Plain yoghurt	100g	200mg	Fortified instant oat cereal	30g	400mg
Plain low fat yoghurt	100g	160mg	Fortified breakfast cereal, e.g. hoops, crisp rice	30g	140mg
Soya yoghurt alternative	100g	120mg	Standard infant formula	210ml (7oz)	95mg
Cheddar cheese	28g (1 slice)	200mg	Soya-based infant formula*	210ml (7oz)	110-140mg

* The use of soya-based infant formula is only recommended under close medical / dietetic supervision for specific medical conditions due to the phytoestrogen content.

What are the best sources of vitamin D?

As so much growth happens during the first year, it is recommended that all infants from birth to 12 months have a supplement of five micrograms (5µg) of vitamin D3 (cholecalciferol) once a day.

Suitable liquid vitamin D supplements include:

- Abidec vitamin D3 drops – 5µg in 0.3ml
- Baby Vit D3 (Shield Health) – 5µg in 2 drops
- Baby D (Kora Healthcare) – 5µg in 0.2ml
- Infant D3 (Sona) – 5µg in 0.25ml

You should check with your pharmacist about the most appropriate supplement for your child, and the correct amount to provide five micrograms each day.

For children, short regular periods of sun exposure between May and September will help the body to make vitamin D. It is important to never let a child's skin go red or burn. Infants under six months should not be exposed to direct sunlight.



In addition, include foods that contain vitamin D regularly, such as:

Meat and poultry	Beef, pork, bacon/ham, lamb, offal such as liver or kidney (not recommended in infants), chicken, turkey
Fish	Oily fish such as mackerel, tuna, salmon, trout, sardines, kippers, herring, pilchards
Eggs	Egg yolks contain vitamin D
Breakfast cereals	Fortified breakfast cereals
Pulses	Beans, lentils, chick peas
Fruit and vegetables	Dried fruit such as raisins and sultanas, mushrooms
Dairy	Fortified milk, fortified yoghurts, fortified spreads, cheese