

Facts on Calcium

Why do I need calcium

Calcium is needed for strong bones and teeth. Bones become stronger in growing children; from our mid-30s onwards our bones gradually start to lose calcium. In aging adults bones may become weaker and more brittle over time. Multiple pregnancies (especially if there is a short gap between them) can also lower the calcium in bones. Ensuring our bodies have enough calcium will help prevent bones getting weaker. Calcium is provided by some of the foods we eat such as dairy products. Vitamin D helps the body absorb calcium from food.

Keeping bones strong

You will lose less calcium from your bones if you:

- take regular weight bearing exercise such as walking;
- have enough calcium in your diet;
- only drink alcohol in moderation;
- stop smoking (smoking increases bone loss);
- get some sunshine outdoors regularly.

How much calcium you need

Children		Teenagers (11-18 years)		Adults	
0-1 years	525mg	male	1000mg	19+	700mg
1-3 years	350mg	female	800mg	pregnant	700mg
4-6 years	450mg	pregnant	800mg	breastfeeding	1,250mg
7-10 years	550mg	breastfeeding	1,350mg		

The table below gives a list of foods rich in calcium

Foods containing about 250mg calcium Aim for three to four portions a day	Foods containing about 100mg calcium	Foods containing about 50mg calcium
Milk, including skimmed / semi skimmed (1/3 pint / 200ml)	Calcium fortified cereals (small bowl / 1oz / 30g)	Green vegetables e.g. broccoli, cabbage (4oz / 100g)
Yoghurt, including soya if calcium enriched (150g carton), Lassi (Portion)	Cottage cheese (one small pot)	Bread (two slices / 2oz / 60g)
Cheese including reduced fat and Paneer (1oz / 30g)	Spinach (4oz / 100 g)	Fromage frais (2oz / 60g)
Soya milk, if calcium enriched (1/3 pint / 200ml)	Baked beans (small tin / 8oz / 200g)	Cheese spread (one triangle / 1/2oz / 15g)
Custard / milk puddings (Half a can / 8oz / 200g)	Dried figs (two figs / 2oz / 60 g)	Nuts e.g. peanuts, almonds, walnuts (4oz / 100g)
Sardines, pilchards, tinned salmon with bones (2oz / 60g)		Dairy ice cream (one scoop / 2oz / 60g)
Tofu (2oz / 60g)		One medium orange

Vitamin D

Vitamin D is also needed with calcium to make healthy bones. Vitamin D helps the body absorb calcium from food. Our bodies can make vitamin D when sunlight shines on the skin. There is no need to sunbathe but being outdoors regularly with the face and hands exposed will help your body to have adequate stores of this vitamin.

Vitamin D is also found in some foods. Good sources of vitamin D include:

- Oily fish
- Liver
- Dried milk powder
- Egg yolks
- Fortified margarines
- Fortified fruit juices
- Fortified breakfast cereals

Some people may not make enough vitamin D if they are not exposed to sufficient sunlight.

For example, people who are housebound or those whose culture or religion requires them to cover up most of their body when they go out. In these circumstances, vitamin D supplements, such as cod liver oil or a multivitamin, may be required.

Vitamin D supplements are also recommended for pregnant and breastfeeding women, young children and people with darker skin.

For people who are over 70 years old or those with a diagnosis of osteoporosis, a supplement containing 15mcg (600 IU) of vitamin D per day is recommended.

Osteoporosis

Osteoporosis occurs when your bones become thinner and are more likely to break. It is more common in women as they get older, although men can get osteoporosis too. If you have a family history of osteoporosis you are also more likely to suffer from it.

In women, having low oestrogen levels can increase the risk of osteoporosis. Low oestrogen levels can be caused by being underweight, having thyroid problems or an eating disorder. Being post-menopausal (particularly if you have had an early menopause) or having your ovaries removed also increases your risk of osteoporosis.

What can I do about it?

Food is important for the health of your bones. Eating a diet rich in calcium can help if you already have osteoporosis and if you are at risk of developing it. Ensuring you have enough vitamin D either in the diet or from sunlight will also help. You may also need to take calcium supplements, ask your GP or dietitian if you think you are not getting enough calcium.

Remember:

- Low fat dairy products contain just as much calcium as full fat products.
- Soya products are excellent alternatives to cow's milk but make sure you choose calcium fortified or enriched products.

If you are concerned about your diet or have any queries regarding this advice please contact a dietitian at Bedford Hospital

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Email: Dietetics@bedfordhospital.nhs.uk