BDA The Association of UK Dietitians

Food Fact Sheet

Calcium

Calcium is important at all ages for strong bones and teeth. This Food Fact Sheet lists the recommended amounts of calcium for different groups of people and the foods and drinks that are rich in calcium. It also gives you some ideas on how you might achieve your recommended intake.

You are more at risk of calcium deficiency if you:

- are on a cow's milk or lactose free diet
- have coeliac disease
- have osteoporosis
- are breastfeeding
- are past the menopause

Meals and snack ideas

- Start the day with cereal (calcium-fortified) with milk or a milk substitute (calcium-fortified).
- Use tinned sardines or pilchards (with the bones) instead of tuna in a sandwich or on toast.
- Have a stir fry including tofu, broccoli spears and chopped nuts for lunch or dinner.
- Add yoghurt/soya yoghurt to fruit as a pudding or use milk or a milk substitute (calcium fortified) to make custard and milk puddings .
- Try a glass of low-fat milk as a snack or to help rehydrate after exercising.
- Don't forget that low-fat dairy products have as much and often more calcium than the full-fat versions.
- Remember to check non-dairy sources have added or are 'fortified' with calcium.
- Try to avoid sugary drinks and snacks. If you choose a calcium-rich food which contains sugar, it is best to eat this as part of a meal instead of as a snack.

Healthy lifestyle advice for healthy bones

- Be active - weight bearing activities are best e.g. walking, aerobics, cycling, running and tennis. Aim for at least 30 minutes of activity, five times a week.
- Smoking is associated with an increased risk of osteoporosis, low bone density and increased risk of hip fracture. Stopping smoking prevents further excess bone loss.

Vitamin D and calcium

Vitamin D helps the absorption of calcium from foods. Most of our vitamin D is made by the action of sunlight on the skin.

In April to September, going outside for 15 minutes, two or three times a week between 11am and 3pm without sunscreen should be enough to produce sufficient vitamin D.

Foods rich in vitamin D include oily fish, eggs and fortified breakfast cereals/spreads but you cannot get enough vitamin D from food alone. You may need to take a supplement if you do not get enough (safe) sun exposure or if you are over 65 years old.

Vitamin D supplements are recommended for all pregnant or breastfeeding women, babies and children aged six months to five years, people aged 65 years and over and people not exposed to much sun.

These supplements are available free of charge to women and children who are eligible for Healthy Start vouchers. Ask your health visitor about this.

Calcium supplements

There are a wide range of calcium supplements available from your local chemist. Remember it is best to get your calcium from food sources.

If you are unable to meet your daily requirements from food, these supplements can be of use but ask your doctor for advice.

Further information:
Food Fact Sheets on other topics including Vitamin D, Supplements and Sugar are available at:
www.bda.uk.com/foodfacts

How to check if you're getting enough calcium in your diet:

1. Use the TABLE 1 to check how many 'calcium stars' you need
2. Then use TABLE 2 to see how much calcium is found in different foods
3. Then, simply add up how many calcium stars you are getting from your diet to make sure you are having enough

TABLE 1 - Daily guideline amounts

Check how many calcium stars[1] you need (1 star = 60mg approx)

Group	**Age** (years)	**Calcium** (mg) per day	**Calcium stars** per day
Infants	Under 1	525	9 stars
Children	1-3	350	6 stars
	4-6	450	7 1/2 stars
	7-10	550	9 stars
Adolescents	11-18	800 (girls) 1000 (boys)	13 stars 17 stars
Adults	19+	700	11 stars
Breastfeeding mums		1250	21 stars
Women past the menopause		1200	20 stars
Coeliac Disease	Adults	1000-1500	25 stars
Osteoporosis	Adults	1000	17 stars
Inflamatory Bowel disease	Adults	1000	17 stars
	Post menopausal women and Men over 55 years	1200	20 stars

[1] When choosing your calcium stars – remember that high sugar intakes often lead to tooth decay. It is important to avoid frequent sugary drinks and snacks for your teeth and your overall health. If you want something sugary, it is best to have it at mealtimes.

TABLE 2 - Calcium in different foods

Calcium in dairy products	Quantity	Calcium (mg)	Stars 1 star = 60mg
Milk, all types	200ml	240	★★★★
Cheese	matchbox-size 30g	220	★★★★
Cheese triangle	1 triangle - 15g	60	★
Yoghurt	120g	200	★★★
Fromage frais	1 pot - 45g	60	★
Calcium-enriched fromage frais	1 pot - 50g	125	★★
Calcium enriched low fat spread	1 serving - 28g	121	★★
Malted milk drink	25g serving in 200ml milk	440-710	★★★★★★★ to ★★★★★★★★★★★
Hot chocolate (light) 20g (with water)	25g serving in 200ml water	200	★★★
Rice pudding	½ large tin (200g)	176	★★★
Custard	1 serving (120ml)	120	★★
Milk chocolate	30g	66	★
Non-dairy sources of calcium *Calcium fortified products*			
Calcium enriched milk alternatives eg. rice[2] /soya/oat/nut/coconut etc	200 mls	240	★★★★
Soya bean curd/tofu (Only if set with calcium chloride (E509) or calcium sulphate (E516), not nigari)	60g	200	★★★
Calcium fortified soya yoghurt/dessert/ custard	125g	150	★★
Calcium enriched orange juice	250mls	195	★★★
Calcium fortified infant cereals	1 serving	60-120	★ to ★★
Calcium fortified cereals	30g serving	137	★★
Calcium fortified instant hot oat cereal	1 tbsp dry cereal (15g)	200	★★★
Calcium-fortified bread	1 slice (40g)	191	★ to ★★★
Other non-dairy sources of calcium			
Sardines (with bones)	½ tin (60g)	258	★★★★
Pilchards (with bones)	1 serving (60g)	150	★★
Tinned salmon (with bones)	½ tin (52g)	47	★
Whitebait	1 small portion (50g)	130	★★★★★★★
Scampi in breadcrumbs	6 pieces (90g)	190	★★★
White bread	2 large slices (100g)	100	★
Wholemeal bread	2 large slices (100g)	54	★
Pitta bread / chapatti	1 portion (65g)	60	★
Orange	1 medium (120g)	75	★
Broccoli, boiled	2 spears (85g)	34	★
Spring greens	1 serving (75g)	56	★

[2] Children under four and a half years old should not have rice drinks as a replacement for cow's milk, breast milk or infant formula.

N.B. Spinach, dried fruits, beans, seeds and nuts are not good sources of calcium. This is because they contain oxalates and/or phytates which reduce how much calcium your body can absorb from them. You should not rely on them as your main sources of calcium.

Written by Mary Feeney and Liane Reeves, Dietitians, on behalf of the Food Allergy and Intolerance Specialist Group of the BDA. The information sources used to develop this fact sheet are available at www.bda.uk.com/foodfacts