

Calcium and Vitamin D

This leaflet explains how you can ensure an adequate calcium (and vitamin D) intake.

This may be difficult to achieve; particularly if your diet is restricted, or have a cows milk allergy/intolerance as dairy products usually provide a lot of most people's intake of calcium.

Calcium

Calcium is essential for the development and maintenance of strong bones and teeth (also for normal blood clotting, nerve function and enzyme activity).

It is an essential nutrient throughout life for everyone and is especially important in children, adolescents, breastfeeding and postmenopausal women.

A poor calcium intake can be an important contributory factor in the development of osteoporosis (brittle bones).

Daily calcium requirements (DOH 1991)

Age group	calcium requirement
0-12 months	525mg
1-3 years	350mg
4-6 years	450mg
7-10 years	550mg
Males 11-18 years	1000mg
Males 19+ years	700mg
Females 11-18years	800mg
Females 19+ years	700mg
Breastfeeding	1250mg
Adults with coeliac disease	1000mg
Post menopausal women	

For children with coeliac disease, there are no guidelines that recommend an increased amount of calcium as long as they adhere to a gluten free and calcium rich diet, .using Reference Nutrient Intakes (RNI) as a guide should be aimed for.

Calcium content of foods (average portion sizes indicated)

MILKS	
Food/Drink in usual portion sizes	Calcium
200mls cow's milk	240mg
200mls goats milk	240mg
200mls soya milk (not calcium enriched)	25mg
200mls organic soya milk	25mg
200mls calcium enriched soya milk	240mg
200mls rice milk (rice milk is unsuitable if under 4.5years)	26mg
200mls calcium enriched rice milk	240mg
200mls organic oat milk	0mg
200mls calcium enriched oat milk	240mg
200mls pea milk	84mg
200mls organic almond milk	32mg
200mls calcium enriched almond, cashew or hazelnut milk	240mg
200mls KoKo dairy free coconut milk	240mg
200mls Hemp milk	240mg
200mls Califia farms Almond milks	380mg
200mls Koko Super coconut milk	340mg
200mls Oatly dairy free oatmilk	240mg
1 glass/200mls Lactofree low lactose milk – (contains cow's milk protein)	240mg

CHEESES/YOGURTS/DESSERTS	
Food/Drink in usual portion sizes	Calcium
30g dairy cheddar cheese	240mg
30g dairy cream cheese	300mg
30g soya cheese 'Cheezly'	90mg
30g melting soya cheese 'Cheezly'	90mg
30g soya free 'Cheezly' (pea cheese)	90mg
30g soya cheese hard (Sheese)	30mg
30g soya cream cheese (Creamy Sheese)	30mg
30g soya cream cheese (Toffuti)	60mg
100g Koko dairy free cheddar	730mg
100g Koko dairy free soft cheese	730mg
100g Violife dairy free coconut cheeses	0mg
100mls Soya ice cream	60mg
125g soya yogurt	120mg
145g 'Wot no dairy?' (pea protein soya free dairy free yogurt)	398mg
125mg dairy yogurt	200mg
50g/small pot fromage frais	44mg
125mg soya custard desert	150mg
120g Tesco dairy free fromage frais	212mg
100mls KoKo dairy free coconut yogurt – plain per 100mls	120mg
100mls Coyo coconut yogurt	0mg
90g pouch Coconut collaborative coconut yogurt with fruit puree	130mg

DRINKS	
Food/Drink in usual portion sizes	Calcium
1 glass/200mls calcium fortified orange juice	245mg
1 glass/200ml Libbys apple juice	136mg
1 glass/200mls tap water (not boiled or filtered)	22mg
10g powder horlicks made with cows milk	400mg
1 cup/200mls Milo made with cows milk	420mg
1 cup/200mls Ovaltine made with cows milk	444mg

CEREALS	
Food/Drink in usual portion sizes	Calcium
40g dry instant porridge (before milk added)	480mg
100g Kellogg's Coco Pops & milk	288mg
30g Kellogg's Frosties & milk	288mg
100g Rice Krispies	0mg
100g Rice Krispies multigrain	382mg
100g Cheerios	525mg
1 Farleys rusk (some are milk free – check ingredients)	66mg

BEANS/NUTS/SEEDS/VEGETABLES/FRUIT	
Food/Drink in usual portion sizes	Calcium
50g tofu (soya bean curd)	255mg
14g = 1 tablespoon sunflower/sesame seeds	85mg
25g = 12 whole almonds	65mg
25g = 7 whole Brazil nuts	90mg

2 heaped tablespoon red kidney beans	100mg
150g = 1 small tin baked beans	75mg

<i>BREAD</i>	
Food/Drink in usual portion sizes	Calcium
1 thick slice of best of both bread	239mg
100g = 3 slices wholemeal bread	50mg

<i>FISH</i>	
Food/Drink in usual portion sizes	Calcium
100g sardines (tinned - where bones eaten)	500mg
60g shelled prawns	90mg
100mg Salmon (with bones)	239mg

<i>VEGETABLES/FRUIT</i>	
Food/Drink in usual portion sizes	Calcium
3 dried figs	170mg
100g spinach	160mg
1 medium orange	75mg
25g = ¼ bunch watercress	55mg
100g dark green vegetables (eg broccoli/sprouts/peas)	50mg

This is only a guide; the amount of calcium in these products may vary, please refer to the product label.

If you are unable to achieve an adequate calcium intake

Despite eating a varied diet and regular meals it may be necessary to supplement your diet with a calcium preparation. Calcium preparations are available in tablet, syrup, chewable and effervescent forms and some are available on prescription. Check the ingredients and amount of calcium they supply. Ask your dietitian or pharmacist for advice if required. You only need to take the calcium preparation on the days you do not achieve your requirement.

Other sources of help

The National Osteoporosis Society (NOS) Camerton, Bath BA1 0PJ. Tel: 0845 450 0230.
www.nos.org.uk

Vitamin D

Vitamin D has several important functions. For example, it helps regulate the amount of calcium and phosphate in the body. These nutrients are needed to keep bones and teeth healthy. A lack of vitamin D can lead to bone deformities such as rickets in children and bone pain and tenderness as a result of a condition called osteomalacia or osteoporosis in adults.

Good sources of vitamin D

We get most of our vitamin D from sunlight on our skin. The vitamin is made by our body under the skin in reaction to sunlight. However, if you are out in the sun, take care to cover up or protect your skin with sunscreen before you turn red or get burnt.

Vitamin D is also found in a small number of foods. Good food sources are:

- oily fish - such as salmon, sardines and mackerel
- eggs
- fortified fat spreads
- fortified breakfast cereals
- powdered milk.

How much vitamin D do I need

Most people should be able to get all the vitamin D they need by eating a healthy balanced diet and by being out in the sun.

However groups of the population at risk of not getting enough vitamin D are:

- all pregnant and breastfeeding women should take a daily supplement of 400IU/10 micrograms of vitamin D
- All babies and young children aged 6 months to 5 years should take a daily supplement containing vitamin D in the form of vitamin drops, to help them meet the requirement set for this age group of 7-8.5 micrograms (0.007-0.0085mg) of vitamin D a day. However, babies fed infant formula will not need vitamin drops until they are receiving less than 500ml (about a pint) of infant formula a day, as these products are fortified with vitamin D
- young children between one and five should have a supplement of 10 micrograms per day, all year round.
- older people aged 65 years and over, people who are not exposed to much sun, such as people who cover up their skin when outdoors or those who are housebound or confined indoors for long periods, people who have darker skin such as people of African, African-Caribbean and South Asian origin should take a supplement of 10 micrograms of vitamin D per day, all year round.

Supplements

You can buy single vitamin D supplements or vitamin D drops at most pharmacies and supermarkets. Women and children who qualify for and already participate in Healthy Start can get free supplements containing vitamin D. See the Healthy Start website www.healthystart.nhs.uk for more information about the scheme

What happens if I take too much vitamin D?

If you take vitamin D supplements, do not take more than 25ug/1000IU unless advised a day, as it could be harmful.

Taking too many vitamin D supplements over a long period of time can cause more calcium to be absorbed than can be excreted. The excess calcium can be deposited in and damage the kidneys. Excessive intakes of vitamin D can also encourage calcium to be removed from bones, which can soften and weaken them.

If you are on a restricted diet, particularly a dairy free diet, it is recommended that you make use of alternative foods such as calcium enriched dairy free milks/cheeses/yogurts and try to eat some of the foods rich in calcium to ensure an adequate intake.

Who should I contact if I have a problem or question?

Speak to your GP or Dietician

Languages/ Alternative Formats

Please ask if you require this information in other languages, large print or audio format.
Please contact: 01895 279973

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Jeżeli chciałbyś uzyskać te informacje w innym języku, w dużej czcionce lub w formacie
audio, poproś pracownika oddziału o kontakt z biurem informacji pacjenta (patient
information) pod numerem telefonu: 01895 279973.

如果你需要這些資料的其他語言版本、大字体、或音頻格式，請致電01895 279 973 查詢。

إذا كنت تود الحصول على هذه المعلومات بلغة أخرى، بالأحرف الكبيرة أو بشكل شريط صوتي، يرجى
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