



Calcium Calculator

Why is calcium important?

Calcium is needed to build strong bones and teeth. It is also involved in maintaining a normal heartbeat, blood pressure and muscle contraction.

Vitamin D

Vitamin D helps the body to absorb calcium from foods. Vitamin D is made through the action of sunlight on our skin during the summer months (April-September). Vitamin D is also found in a small number of foods (oily fish, egg yolks, fortified margarines and some breakfast cereals); however it is very difficult to get all the vitamin D we need from diet alone.

- It is recommended that all children under the age of 5 years take a daily multivitamin supplement containing vitamins A, C and D. You may be eligible for free Healthy Start vitamins – for more information see: www.healthystart.nhs.uk
- It is recommended that all children over 5 years also take a daily vitamin D supplement during the winter months; or throughout the year if they spend a lot of time indoors or wear clothing that covers most of their skin when outdoors.
- Babies up to the age of 1 year require 8.5-10 micrograms of vitamin D each day. Children over 1 year require 10 micrograms of vitamin D per day.

Healthy Bones

Calcium and vitamin D work best alongside physical activity to strengthen bones. It is recommended that children do at least 60 minutes of activity every day. Weight-bearing exercises such as walking, cycling, running and tennis are best for building bone strength.

How much calcium does my child need?

This depends on your child's age:

| Age (years) | Calcium (mg) per day |
|--------------|----------------------------------|
| Under 1 year | 525 mg |
| 1-3 years | 350 mg |
| 4-6 years | 450 mg |
| 7-10 years | 550 mg |
| 11-18 years | 800 mg (girls) 1000 mg (boys) |

Information for Patients

Which foods contain calcium?

Dairy products are rich sources of calcium:

| Food Average Portion | Calcium Content |
|---|-----------------|
| 200 mls milk | 240 mg |
| 1 pot yogurt (120g) | 170 mg |
| 1 small pot fromage frais (45g) | 70 mg |
| 1 triangle cheese spread | 84 -138 mg |
| Cheese (30g) | 220 mg |
| Rice pudding ($\frac{1}{2}$ tin – 200g) | 198 mg |
| Custard pot (125g) | 133 mg |
| Malted drink (25g serving made up with 200 ml milk) | 800 mg |

Children on a cow's milk free diet

For children following a cow's milk free diet, there are many non-dairy sources of calcium. For all dairy-free milks / yogurts, please check the food label to ensure they are fortified with calcium.

| Food Average Portion | Calcium Content |
|---|-----------------|
| 200 mls calcium fortified milk alternatives, eg. Soya / Oat / Nut / Coconut | 240 mg |
| 200 mls calcium fortified rice milk (can be used if your child is over 4½ years old) | 240 mg |
| Calcium fortified soya yoghurt/custard (125g) | 150 mg |

Other Foods containing Calcium

| | |
|---|------------|
| Calcium fortified breakfast cereals (30g) | 130 mg |
| Calcium fortified instant hot oat cereal (30g) | 402 mg |
| White bread (1 slice) | 50 mg |
| Calcium fortified bread (1 slice) such as: Hovis Best of Both or Kingsmill 50:50 Vitamin Boost | 150-179 mg |
| Pitta bread / chapatti (65g) | 60 mg |
| Tofu set with calcium chloride or calcium sulphate (60g) | 200 mg |
| $\frac{1}{2}$ tin salmon (52g) | 47 mg |
| Scampi in breadcrumbs (6 pieces) | 190 mg |
| Broccoli (2 large florets) | 34 mg |
| Spring greens (75g) | 56 mg |
| Okra (6 fingers, stir fried) | 66 mg |
| 1 medium orange | 75 mg |

Note: 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.

Ideas for increasing your child's calcium intake

- Offer 3 portions of dairy foods / dairy alternatives every day to help meet your child's calcium requirements
- Add cheese / milk / milk alternative to mashed potato
- Offer calcium fortified cereal for breakfast with milk or a milk substitute
- Offer stir fry made with tofu and broccoli / spring greens for lunch or evening meal
- Add dairy / dairy free yogurt to fruit
- Use milk / milk alternative to make custard/milk puddings
- Offer glass of milk/milk alternative as a snack – can add milkshake syrup/powder to flavour
- Opt for calcium fortified bread when making toast / sandwiches
- Pasta can be cooked in milk / milk alternative in place of water

For further information please contact the Paediatric Dietitians on 0121 424 1674.

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email patientexperience@uhb.nhs.uk.