

Allergy and Immunology

Calcium

Calcium is a mineral that is important for strong bones and teeth. Low calcium intakes have been linked to osteoporosis in later life.

The major sources of calcium in most Western diets are dairy products such as milk, yoghurt and cheese. Other good sources of calcium are bony fish (canned salmon and sardines), almonds, fortified soy products and fortified plant rice beverages.

Small quantities of calcium can be found in other nuts, some dried fruits, sesame seeds and green leafy vegetables (spinach, parsley).

Milk allergy is the most common food allergy affecting young children. A large number of children with milk allergy also have soy allergy so obtaining enough calcium from other dietary sources can be difficult.

The table below lists the calcium content of a number of foods.

1 serve of calcium is equal to 250mg. The following amounts of food provide one serve of calcium (on average).

| Food Product | Serve size = | | |
|--|----------------------------|--|--|
| | 1 serve of calcium (250mg) | | |
| Cow's milk | 200mls or 1 cup | | |
| Yoghurt | 200g or 1 regular tub | | |
| Cheese | 35g or 2 cheese slices | | |
| Soy milk, fortified with calcium | 200mls or 1 cup | | |
| Soy yoghurt | 200g or 1 regular tub | | |
| Soy cheese | 125g – 400g (varies) | | |
| Fortified rice beverage | 200mls or 1 cup | | |
| Almonds | 100g | | |
| Tahini | 75g | | |
| Dried figs | 125g | | |
| Bony fish (must eat bones) | 75g | | |
| White sesame seeds | 400g | | |
| Boiled spinach and raw parsley | 150g | | |
| Milk chocolate | 120g | | |
| Breast milk | 750mls | | |
| Infant formula – Step 1 From birth | 500mls | | |
| Infant formula – Step 2 Follow On | 300-350mls | | |
| Toddler Formula – Step 3 | 200mls or 1 cup | | |
| Soy formula | 400mls | | |
| Peptijunior, Alfare, AllerPro and Alfamino | 500mls | | |
| formulae | | | |
| Neocate LCP/Gold, Novalac Allergy | 400mL | | |
| Neocate Advance formula | 230mls or 1 cup | | |
| Elecare formula - < 12 mths of age | 300mls | | |
| Elecare formula - > 12 mths age | 200mls or 1 cup | | |



Calcium needs change with age. Below is a table with the recommended daily intake or RDI of calcium for children and adults and the number of serves of calcium needed to provide the RDI. 1 serve = 250mg Calcium.

| Age | Calcium requirement per day (mg) or RDI | Number of serves per day |
|---------------------|--|--------------------------|
| 1-3yr | 500 | 2 |
| 4-8 | 700 | 3 |
| 9-11 | 1000 | 4 |
| 12-18 | 1300 | 5 |
| Breastfeeding women | 1000 | 4 |

CALCIUM SUPPLEMENTS

Calcium supplements are available over the counter at chemists and supermarkets. They are used to supplement the diet if the dietary intake of calcium is low. Ask your pharmacist for more information regarding the below products.

| Supplement Name | Description | Calcium Amount/tablet | Other |
|---|--|--------------------------|--|
| Actical | Chewable Vanilla flavoured tablet | 200mg | Vit D 100IU |
| Swisse kids Calcium Plus D3 | Chewable berry flavoured capsule | 200mg | Vit D 300IU |
| Ostelin kids Vitamin D and Calcium | Chewable berry flavoured tablet | 350mg | Vit D 300IU |
| Nature's Way Kids Calcium + D3 | Chewable Strawberry flavoured burstlet | 200mg | Vit D 300IU |
| Nature's Way Calcium and Vitamin D (Vita Gummies) | Vanilla/raspberry flavoured chewable pastilles | 90mg | Vit D 100IU *contains gluten/wheat |
| Swisse Calcium + Vitamin D | Chalky tablets that can be crushed and | 333mg | Vit D 333IU |
| Caltrate varieties | added to foods or swallowed whole | 500-600mg | Vit D 500- 1000IU |
| Calci-tab 600 | | 600mg | |
| Cal-sup | Chewable spearmint flavoured tablet | 500mg | |
| Osteo Vit-D and Calcium | Chewable vanilla flavoured tablet | 600mg | Vit D 1000IU |
| Ostelin Vitamin D & Calcium | Chewable citrus flavoured tablet | 600mg | Vit D 500IU |
| Calsource 1000 | Dissolvable tablet | 1000mg | |
| Calvid | Orange flavoured dissolvable granules | 1000mg | Vit D 880IU |

TIP: Calcium supplements are more effective when taken:

- In split doses (calcium is best absorbed in doses less than 500mg)
- Separately from iron or iron rich meals (iron rich foods include red meat, chicken, fish and shellfish)