

Calcium for children

Calcium is an essential mineral for building strong bones and teeth during childhood and teenage years. Calcium has other roles in the body including helping out with heart functions.

Our bones hold on to most of our calcium, which must be "topped-up" daily from our diets. As much as 99% of the body's calcium is found in the bones.

Osteoporosis is an exaggeration of the normal loss of bone mass, and if we don't have enough calcium in our earlier years we may be a candidate for weak bones. The result is bones are highly susceptible to fracture. The exact cause of osteoporosis is unknown, however, inadequate calcium in the diet and lack of exercise are thought to contribute.

Vitamin D

Getting enough Vitamin D is important too. It helps the body absorb calcium from the diet.

In Australia, the main source of Vitamin D is sunlight. Most people get enough Vitamin D during typical day-to-day outdoor activities. To get enough you need to expose your hands, face and arms (or equivalent area of skin) for about 5-15mins, 4-6 times per week.

Vitamin D deficiency can result in rickets – a condition causing bone and muscle weakness and bone deformities. There

are small amounts of Vitamin D in foods such as oily fish (salmon, herring, and mackerel) and liver, eggs and food fortified with Vitamin D, such as margarine.

BEST SOURCES OF CALCIUM:

- Milk (include whole, reduced fat and skim)
- Soy milk, fortified with calcium
- Cheddar cheese and other hard cheeses
- Yoghurt.

FOODS WHICH SUPPLY CALCIUM IN SMALLER AMOUNTS:

- Sardines and salmon with bones
- Dried figs and apricots
- Ice cream
- Soy beans, chick peas
- Sesame seeds
- Nuts (almond and brazil nuts)
Whole nuts are only suitable for children over 5 years due to the risk of choking
- Parsley
- Prawns.

WAYS TO INCREASE CALCIUM INTAKE:

- Offer a milk drink daily rather than sweetened cordials and juices.
- Consider breakfast cereal with milk as a snack at any time
- Add yoghurt to milk for a delicious smoothie
- Make ice-blocks by freezing flavored milk or yoghurt on a stick. Blend with fruit for a greater variety
- Choose desserts made with milk e.g. rice puddings, custards, junkets, milk jellies, jelly whips
- Ice cream and fruit as a dessert choice

Yoghurt

- Mix with dried or mashed fruit
- Add to breakfast cereals, desserts, muffins
- Use as an alternative to mayonnaise for salad dressings
- Substitute natural yoghurt for sour cream in dips
- Add yoghurt to pasta dishes, stir fries, tacos and nachos

How much calcium do we need daily?

Age	Recommended Dietary Intake (mg per day)
1-3 yrs	500
4-8 yrs	700
9-13 yrs Boys Girls	1000–1300 1000–1300
14-18 yrs Boys Girls	1300 1300

Sources of Calcium

Food	Serve size	Calcium/serve (mg)
Dairy		
Cows milk (average)	200mL	240
Physical™ milk	200mL	350
Anlene™ milk	200mL	400
Soy milk (average)	200mL	240
Soy good essential	200mL	300
Fruit yoghurt–regular	200g	310
Fruit yoghurt – low fat/diet	200g	340
Plain/natural yoghurt – regular	200g	340
Plain/natural yoghurt – skim	200g	360
Soy yoghurt	200g	240
Cheddar cheese–average	30g	250
Fetta	30g	100
Cream cheese	30g	40
Soy cheese	30g	135
Ice cream – average all types	50g	65
Fruit and vegetables		
Fresh fruit–average	1 medium	20
Green leafy vegetables–average	1 cup	80
Other vegetables–average	1 serve (1/2 – 1 cup)	20
Other significant sources		
Almonds	30g	70
Brazil nuts	30g	55
Tahini (sesame seed paste)	1Tbsp	80
Tofu (soft and firm)	100g	80-160
Baked beans	½ cup	60
All bran/Sports Plus/Fortified cereals	30-45g	200
Egg	1 large	35
Sardines with bones	50g	250
Salmon/tuna with bones	100g	300

Meal plan Children 1 to 3 yrs — Recommended Dietary Intake 500 mg Calcium	Calcium (mg)
Breakfast	
2 weetbix with milk	240
½ punnet strawberries	20
Morning Tea	
Yoghurt (100g) and banana	150
Lunch	
Sandwich wholemeal bread	-
Meat/fish/egg/chicken	0-35
Slice of cheese	150
Salad 1 cup	-
Afternoon tea	
6 pieces dried apricot	20
Dinner	
Meat/fish/chicken	0-35
Baked potato	-
Broccoli (50g)	20
Carrot (1/2 cup)	20
Supper	
Cup of milk	240
1 cup of canned fruit	20
TOTAL	800–950

Meal plan Children 4 to 8 yrs—Recommended Dietary Intake 700 mg Calcium	Calcium (mg)
Breakfast	
2 weetbix with 250ml milk	300
Morning Tea	
Yoghurt (100-200g)	150-350
Lunch	
Sandwich White bread with Meat/fish/egg	60–100
Salad 0.5 cup	-
Cheese 1 slice	150
Water	-
Afternoon tea	
3 pieces dried apricot	20
Dinner	
Meat or substitute	0-35
Baked potato	-
Broccoli (50g)	35
Carrot (1/2 cup)	20
Supper	
Cup of milk	240
TOTAL	950–1050

Meal plan Boys and Girls 9 to 13 Recommended Dietary Intake 1000 to 1300 mg Calcium	Calcium (mg)
Breakfast	
2 weetbix with 250ml milk	300
Morning Tea	
Yoghurt (100-200g)	150-200
Lunch	
Sandwich wholemeal bread	60
Cheese/meat/fish and salad	150–300
Afternoon tea	
Banana	20
Dinner	
Meat/chicken/fish/legumes	300
Baked potato	20
Broccoli (25g)	35
Carrot (1/2 cup)	20
Supper	
Cup of milk	240
TOTAL	1100–1300

Meal plan Boys and Girls 14 to 18 Recommended Dietary Intake 1300 mg Calcium	Calcium (mg)
Breakfast	
2 weetbix with 250ml milk	300
Morning Tea	
Yoghurt (200g)	350
Lunch	
Sandwich wholemeal bread	60
Cheese/meat/fish and salad	20–300
Afternoon tea	
Banana smoothie	300
Dinner	
Meat/chicken/fish	30–300
Baked potato	20
Broccoli (25g)	35
Carrot (1/2 cup)	20
Supper	
Cup of milk	240
TOTAL	1300–1700

Reference: http://www.health.nsw.gov.au/mhcs/publication_pdfs/7665/OTH-7665-ENG.pdf