

Family Friendly Factsheets!

Bone Benefits



As children grow and develop so do their bones and while their genes determine the potential strength and height of their bones, habits such as eating a balanced, calcium rich diet and taking regular weight bearing exercise can influence how strong bones become. Ensuring your children learn and carry out bone-benefiting behaviours could prevent their bones from becoming brittle in later life.

Building and maintaining strong bones

Bone is living tissue which grows and strengthens until early adulthood by constantly replacing old bone cells with new. You could think of this strengthening process as a 'bone bank' where calcium can be deposited and saved in bones during childhood so there is enough to draw on in later life. From our mid-thirties onwards very small withdrawals of calcium start to be made and bone gradually loses strength over time. These withdrawals can accelerate under certain circumstances, for example, in women during the menopause, and may lead to osteoporosis, the brittle bone disease. Therefore, building up your child's 'bone bank' account now could prevent the withdrawals in later life making their bones brittle.

Enjoying a bone beneficial diet

You may already know that calcium helps keep bones healthy, but did you know it needs the help of many other nutrients? A varied and balanced diet such as that indicated by the balance of good health (pictured below) provides the nutrients needed to develop and maintain strong bones.



Getting enough calcium and vitamin D

Make sure you and your children choose 2 to 3 servings of calcium rich foods everyday. Overleaf is a list of calcium rich foods and the calcium content of one portion to use as a guide and a chart to show calcium requirements at different ages.

Vitamin D is also essential for bone health as it controls the body's absorption of calcium. The main source of vitamin D is from the action of sunlight on our skin. This way it can be stored in fat in the body and used throughout the year. Five to fifteen minutes of sun exposure on fore arms between 10am and 3pm during the summer months (May to October) is sufficient to make enough vitamin D for the rest of the year, but avoid prolonged exposure or sunburn. Eating foods rich in vitamin D such as oily fish, eggs, butter or margarine can also be beneficial but avoid supplements that contain this vitamin as you can have too much of a good thing!!

Weight bearing physical activities

Like muscles, the more that bones are used the stronger they get. Any kind of physical activity is great, but the best kind for bones is weight-bearing activities such as those listed below:

- Walking and Running
- Tennis
- Volleyball
- Dancing
- Football
- Skateboarding
- Basketball
- Skipping and Aerobics
- Hockey
- Roller-skating
- Gardening
- Hop scotch

It is important for kids (and adults!) to be active everyday. Being physically active can be a brilliant way for families to spend time together, whether out on a family walk, dancing round the house to music together or just asking your children to help you around the house.

Following the leader

The best way of encouraging healthy habits in children is to be a good role model yourself. Your children look to you to show them the way, and your habits, good or bad, have a strong influence on theirs. Take up some bone-benefiting habits, and you and your children can look forward to having strong bones for life.

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Calcium Requirements:

Age	Daily calcium requirement (mg)
Under 1 year	525
1 - 3 yrs	350
4 - 6 yrs	450
7 - 10 yrs	550
11 - 18 yrs	800(females) 1000(males)
Adults	700
During breastfeeding	1250

Calcium rich foods:

Food and food group	Portion	Approx mg of Calcium
Dairy foods		
Skimmed milk	280ml/ ½ pint (1 glass)	355
Semi-skimmed milk	280ml/ ½ pint (1 glass)	345
Whole milk	280ml/ ½ pint (1 glass)	340
Cheddar cheese	40g (Matchbox size)	325
Yoghurt	125g (1 pot)	200
Soft cheese spread	23g (1 large triangle)	120
Cottage cheese	112g (1 small pot)	80
Ice cream	60g (average scoop)	80
Dairy Free Alternatives		
Soya milk, calcium enriched	280ml (1 glass)	370
Rice milk, calcium enriched	280ml (1 glass)	335
Soya yoghurt	150g (1 pot)	150
Nuts and Seeds		
Almonds	30g	95
Whole sesame seeds	1tbsp	90
Meat, Fish, Poultry and alternatives		
Tinned sardines	85g (1 small tin)	324
Tinned Pilchards	85g (1 small tin)	275
Tofu	50g	200
Tinned salmon with bones	85g (1 small tin)	181
Fruit and Vegetables		
Fruit juice with added calcium	250ml (1 glass)	300
Kale, cooked	200g (large portion)	94
Okra	50g (average portion)	75
Orange	1 medium size	55
Dried figs	2 medium size	54
Dried apricots	56g (7 medium size)	40
Broccoli	90g (2 spears)	35
Cereals		
Fortified cereal bars	Per bar	180
Wholemeal bread	2 slices	75
Swiss style muesli	50g (3 tbsp)	65