

### Primary school prevention of brittle bones

Focusing clearly on the benefits of consuming a calcium rich lunch during primary school days is one of the major aims this year of Healthy Bones Week August 3-9.

Building bone density during childhood and teenage years is especially important. It's during this time, just before puberty that the body is most efficient at storing calcium and so establishing bone strength to last a lifetime.

Perhaps we think of our bones as being constantly solid structures, but in fact they are continually being renewed and strengthened in a cycle regulated by calcium, vitamin D and certain hormones. With age, this renewing process slows and bones can weaken.

Peak bone mass is achieved by our twenties, so it's essential during the first two decades of life to have a diet containing plenty of calcium and to undertake plenty of regular weight-bearing exercise.

Osteoporosis is the name given to the condition which can be quite simply described as brittle bones (literally the word osteoporosis means porous bones) – bones that break and crack more easily. All bones are at risk, but the most common fractures occur in the spine, the hip and the wrist.

Osteoporosis has been dubbed the “silent epidemic” because signs and symptoms are difficult to identify until bones actually break. Even then the diagnosis is sometimes overlooked. All the more important, therefore, that we put in place procedures to prevent osteoporosis.

Women have a higher risk of developing osteoporosis at an earlier age. This is because of hormonal changes following menopause. However, osteoporosis is certainly not just a women's disease. While fractures from fragile bones are less common in men than women, when they do occur they are associated with more long term health problems and a greater likelihood of death.

In Australia one in two women and one in three men over the age of 60 will suffer a fracture due to osteoporosis.

Both lifestyle and genetic factors have a role in determining bone density and strength; and while we can't do much about choosing our parents, we can address the issues of exercise and diet.

The recommended daily intake of calcium is about 1000mg for young adults, and for teenagers and older adults is about 1300mg. Three or four serves of dairy foods each day will generally achieve these aims. A serve is equivalent to a 250ml glass of milk, a 200g tub of yoghurt or two slices (about 40g) of cheese. Each serve provides approximately 300mg of calcium. Green leafy vegetables, nuts, cereals and legumes also contribute calcium to the diet, but in much smaller amounts than dairy foods.

Unfortunately, it seems that thousands of Australian children are missing out on important bone-building nutrients at school. A recent Roy Morgan study showed that at lunchtime only 20% of children are eating cheese and only 6 or 7% are having milk or yoghurt. The study also revealed that 84% of primary school-aged children were consuming fewer than the recommended three or more serves of dairy foods a day.

In “lifting the lid” on school lunches, National Healthy Bones Week has raised awareness of the need for more dairy foods on our kids' menus. Whether the lunch is prepared at home or comes from the school canteen, there's always a place for the cheese sandwich.

There are some even more interesting dairy rich snacks and meals for school or home at the [www.healthybones.com.au](http://www.healthybones.com.au) web site. And you can vote your school canteen “best and fairest” to win cash and vouchers at the site.

Meanwhile, for more advice about keeping your bones strong and healthy ask for one of the fact cards at pharmacies providing the Pharmaceutical Society's Self Care health information. Phone 1300 369 772 for the nearest location.