Serve Up

**Bone Strength**

Milk & dairy products are good for bone health Fact Sheet

**The benefits of dairy products**

- Excellent source of calcium, phosphorus, protein and other nutrients that are important both for bone and overall health.
- Calcium is vital for strong bones and is a major building block of our skeleton; 99% of the 1 kg of calcium found in the average adult body resides in our bones.
- Milk and other dairy foods are the most readily available sources of calcium.
- Evidence strongly supports the benefits of dairy products for bone and muscle health.
- Studies show that bone loss is reduced and there is an improvement in muscle mass and strength with adequate dairy intake.
- In some countries, milk is also fortified with vitamin D, which is an added benefit to bone health.

**Dairy versus other calcium food sources**

- Dairy foods are rich sources of calcium (with the added advantage of providing protein and potassium).
- Non-dairy foods containing calcium include: certain vegetables (e.g. broccoli or kale); whole canned fish with soft edible bones such as sardines; some nuts; calcium-set soy products (tofu, soy milk); and some mineral waters.
- People would need to eat numerous servings of kale or broccoli or other non-dairy foods to get the equivalent amount of calcium provided by just one serving of yoghurt, cheese, or milk.
- For children, who often avoid green vegetables, dairy products are often the preferred source of calcium and protein – both essential nutrients for growing bones.
The truth about dairy products

**MYTH**

> Milk and other dairy foods are not good for bone health because they are ‘acid-forming’, and as a result calcium is leached from the bones to prevent the body from becoming too acidic.

**FACTS**

- Milk and yoghurt are not ‘acid-forming’ foods. They produce a neutral residue when digested. In contrast, hard cheeses such as parmesan and cheddar are acid-forming. The acid-produced from consuming hard cheeses can be neutralized by ingestion of more fruits and vegetables.
- As long as you are getting a reasonable amount of calcium from your diet, your body will ensure that you have the right amounts of calcium circulating in your body.
- If your calcium intake is too low to maintain adequate calcium blood levels, calcium will be released from your bones and this can weaken them.

**MYTH**

> Western countries, where people tend to consume more dairy foods compared to other cultures, are more prone to osteoporosis and broken bones than other cultures in which less dairy is consumed.

**FACTS**

- Many factors determine whether a person will develop osteoporosis and be at increased fracture risk.
- The link between calcium consumption and fracture risk is comparatively weak compared to the link between fracture risk and other key factors such as age, genetics, or other risk factors.
- Countries with high rates of fractures tend to be countries with longer life expectancies (e.g. Nordic countries). Fracture rates are now rising in non-Western countries (e.g. China) as they see increasing longevity in parallel with sedentary lifestyles.
- Genetics (race, sex, family disposition) are major determinants of osteoporosis and fracture risk. Lifestyle habits such as physical activity, body weight, smoking, alcohol-use, as well as certain medications and diseases, are also important determinants of fracture risk.
- Dairy food intake is not responsible for higher fracture rates, nor does dairy consumption alone guarantee strong healthy bones.

**MYTH**

> People who have lactose sensitivity/intolerance cannot consume any dairy products.

**FACTS**

- Very few people in Western countries are completely lactose intolerant.
- Most people with lactose sensitivities find that they can still enjoy certain dairy products, such as natural yoghurts or cheeses. They may also tolerate milk when consumed in small amounts. Through trial and error, they often discover which dairy foods they can tolerate (and in what quantities), or they take lactase tablets when required.