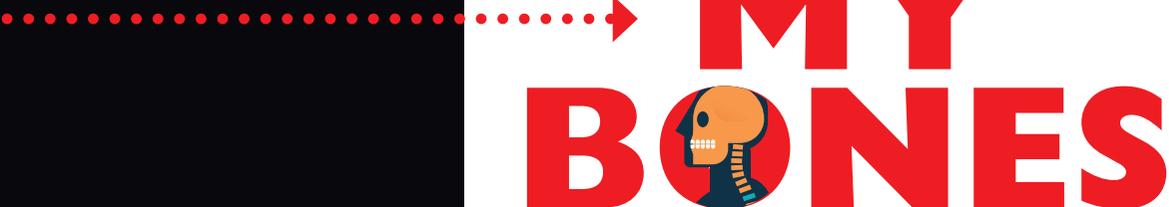


42 countries include dairy in their dietary recommendations at between two and five servings a day. ”

I FEEL IT IN MY BONES



by Dr Johanita Kruger

While milk has long been regarded as a healthy, whole food that can provide almost all the nutrition one needs, the Internet and social media are full of negative information about milk, especially as far as its role in bone health is concerned.

There has been some flip-flopping in the media about the nutritional value of various foodstuffs. One day the experts say one thing and the next day they seem to say another. This shatters the confidence or trust consumers had in the scientific or governmental body that made the original statement. Consumers then go on to seek other sources of information, for example on the open-source Internet and social media. They find it difficult to evaluate the information they find, as nutrition and health are personal issues, embracing factors like culture, religion and socio-economic status. A lot of information on the Internet and social media is fuelled by opinion and anecdotes

describing people's personal experiences and, more often than not, includes a lot of hyperbole, fear-mongering and alarmist language. This is what seems to have happened with milk.

While bone health is very complex, requiring the consumption of a wide array of nutrients, the main minerals and vitamins in milk are calcium, phosphorus, magnesium and vitamin D, A and K. Bone can be considered a protein matrix, within which calcium, phosphorus and magnesium salts are deposited to give the bone its strength. Vitamin D is vital for the absorption of calcium and phosphorus, and vitamin K is a cofactor for an enzyme that modifies the proteins in bone to facilitate calcium-binding.

TELL THE TRUTH

So the question is: Is milk really bad for bone health or does the negative information arise from a biased evaluation of the research that has been conducted in this regard?

Among other things, consuming milk and dairy products contributes substantial amounts of calcium, phosphorus, vitamin B₂, vitamin B₁₂ and, while to a somewhat lesser degree, still significant amounts of vitamin A, vitamin D and zinc to the diet. Higher dietary recommendations for dairy are associated with larger contributions of dairy towards the various nutrient intakes. Milk is often fortified with vitamin D, which can then be a very good source; otherwise, sufficient sun exposure can ensure vitamin D production in the skin. Replacing the calcium in dairy in the diet with alternative food products is very difficult and would require an extremely well-planned diet.



• • **||** *In various other studies, yoghurt intake is mostly associated with improved bone health.*

The science

There are multiple research studies available that have looked into the association of total dairy consumption, specifically milk, yoghurt and cheese consumption, and bone health, including bone mineral density (BMD) and risk of fractures. The one most frequently quoted to illustrate the supposed "dangers" of milk consumption is a large study published by Prof. Michaëlsson and colleagues from Uppsala University in the *British Medical Journal* entitled: "Milk intake and risk of mortality and fractures in women and men: cohort studies". The objective of the study was to examine whether high milk consumption was associated with mortality and fractures in women and men. High milk intake was associated with higher mortality in one cohort of women and in another cohort of men. The researchers did, however, state that, due to the limitations of the study, the results should be interpreted with caution.

