

## THE SUNSHINE VITAMIN

Calcium and vitamin D go hand-in-hand. Vitamin D assists in the absorption of calcium, and recent research suggests that calcium and vitamin D taken in combination can significantly reduce the risk of cancer.<sup>7</sup>

The majority of New Zealanders are deficient in vitamin D.<sup>8</sup> Plants do not contain useful amounts of vitamin D. But, some plant foods are fortified with this vitamin (e.g., Golden Canola Lite margarine and Rice Dream Original enriched rice milk).

Sunshine is usually seen as the best vitamin D source. Try to get at least 15 minutes of sun exposure on the face and hands each day. Consider supplements if blood tests show vitamin D levels are below the optimum status of 80 nmol/L.

## MAGNESIUM, POTASSIUM, VITAMIN C AND VITAMIN K

Magnesium, potassium, vitamin C and vitamin K, (especially K2 which is found in fermented soy products and many vegetables) are all required for good bone health. A healthy diet that includes at least five servings a day of fruit and vegetables, should optimise the intake of these, and the other micronutrients that our bodies need.<sup>9</sup>

## FOUND THIS USEFUL? WE HAVE LOADS MORE.

Visit our website for a complete list of helpful nutrition leaflets, recommended links and vegan recipes.

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## SUPPLEMENTATION

If you are concerned that you are not managing your diet efficiently and wish to use supplements, choose either tablets containing 500 milligrams of elemental calcium taken twice daily, or for better bioavailability, a sachet (1,000mg) of calcium carbonate powder. If supplementing vitamin D, a 1000 IU tablet can be taken daily with an extra one at weekends, or a weekly tablet of 50,000 IU can be obtained on prescription from a doctor. Vitamin D2 is the vegan form of vitamin D.

## FOR OPTIMUM BONE HEALTH

Don't forget weight bearing exercise is vital for building and maintaining bones.

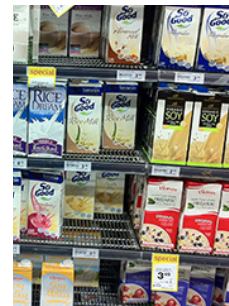
# CALCIUM (+VIT D) THE BONE TRUTH



#4 CALCIUM (& VIT D)

## HEALTHY BONES WITHOUT DAIRY

Most New Zealanders have been brought up to believe that only dairy products can make our bones strong and healthy.



Yet there are many plant-based sources which provide us with all the calcium we need for top nutrition, and offer an optimal calcium balance.

## DID YOU KNOW?

-  Vegans have a similar calcium balance to non-vegans
-  Drinking more cows' milk does not decrease fracture risks
-  Weight bearing exercises are vital for building and maintaining healthy bones
-  Vitamin D is vital for optimum calcium absorption, yet most Kiwis are deficient in vitamin D



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[veganchristchurch.org.nz](http://veganchristchurch.org.nz)

Written by Yolanda Soryl, March 2019. Medical advisor: Dr Mathew Hobbs.  
Thanks to the members of our vegan community for providing their photos for our leaflets.

## EXCELLENT PLANT-BASED SOURCES OF CALCIUM



## WHAT DOES CALCIUM DO?




Calcium is a vital mineral which is important for healthy bones and teeth, and for many other tasks including nerve and muscle function, and blood clotting. Many plant foods contain calcium. But, it is the balance of calcium with other minerals in the diet - plus good Vitamin D intake and exercise - which offers optimum protection for good bone health. If dietary calcium is low, the body will take calcium from bones to use it for other critical body functions. Therefore, getting sufficient calcium is very important to avoid bone density problems.

## HOW MUCH DO WE NEED?

There is no international consensus on what is the healthiest or safest amount of calcium we need. New Zealand's recommended calcium daily intake is substantially higher than those of many other countries.

### RECOMMENDED DAILY CALCIUM INTAKE

(The New Zealand Ministry of Health)

	YEARS	(mg)
	1-3	500
	4-8	700
	9-11	1,000
	12-18	1,300
	19-70	1,000
	Over 70	1,300
	19-50	1,000
	Over 51	1,300

## SOME EXCELLENT PLANT-BASED CALCIUM SOURCES

- 1/2 cup almonds (178mg)
- 8 apricots (46mg)
- 2 tbsp blackstrap molasses (400mg)
- 1 cup bok choy (158mg)
- 1 cup broccoli (70mg)
- 1 cup cabbage (70mg)
- 4 dried figs (168mg)
- 1 scoop Lite Licks ice cream (200mg)
- 1 cup Vitasoy rice milk (300mg)
- 1 cup So Good soy milk (375mg)
- 1/2 cup Kingsland soy yogurt (60mg)
- 2 tbsp tahini (128mg)
- 1 cup Bean Supreme tofu (315mg)
- 2 slices wholemeal bread (70mg)

## CALCIUM BALANCE AND ABSORPTION

High intakes of calcium do not guarantee calcium absorption, because calcium status is not simply a matter of calcium intake, but also of calcium balance. Vegans have a similar calcium balance to non-vegans, even when their calcium intake is significantly lower.<sup>1</sup> Those on diets high in plant consumption better absorb and retain calcium.<sup>2</sup> Sodium (salt) and caffeine drinks (such as coffee and cola) can also negatively affect calcium balance.

### FREE DOWNLOADS

We have many other informative leaflets on health and nutrition, including raising vegan children, available at: [veganchristchurch.org.nz](http://veganchristchurch.org.nz)



## DAIRY AND CALCIUM

Whilst dairy companies continually promote dairy products for calcium and bone health, studies repeatedly show that drinking more cows' milk does not decrease fracture risks.<sup>3,4,5,6</sup> New Zealand, a country with a high rate of dairy intake, is also a country with a high rate of osteoporosis. Clearly, despite claims from the dairy companies, more dairy does not necessarily equal better bone health.

Other issues arising from using dairy to obtain calcium include the associated high fat intake and the problem with absorption due to the acidifying effect of animal protein. Further, recent studies found that a higher consumption of cows' milk may be associated with a higher rate of death.<sup>5</sup>



**“Well planned vegan and other types of vegetarian diets are appropriate for all stages of the life cycle, including during pregnancy, lactation, infancy, childhood, and adolescence.”**

American Dietetic Association, Dietitians of Canada: Vegetarian Diets. Statement supported by Dietitians New Zealand.

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