



**HealthMap**  
Gut Health Professionals

# HOW TO GET ENOUGH CALCIUM WHEN YOU CAN'T EAT DAIRY



HealthMap Copyright 2020

## Calcium-rich foods when you can't eat dairy.

If you can't eat dairy or animal products to get your calcium then you need to ensure you are getting enough calcium elsewhere. Why?

### Good bone health.

Our body stores ~99% of in our bones and teeth and is constantly build up strength into adulthood.

### Heart Health

We need calcium to keep our heart muscle pumping.

### Nerves

Calcium is needed for cell signalling which tells your muscles what to do to keep you moving.

### How much is enough?

To keep your body running like a well-oiled machine you need to make sure you are getting enough calcium each day. Here's a guide for the Recommended Daily Intake (RDI).

- Women under 50: 1,000 mg/day
- Men under 71: 1,300 mg/day
- Women over 50 (and men over 71): 1,300 mg/day.

### Why do older adults need more?

Because of osteoporosis which can develop as we age. Ensuring you get enough calcium as you age can prevent broken bones (due to falls) which will limit mobility and life in general.



Here is a table to give you a guide on what non-dairy foods have calcium.

<b>Foods</b>	<b>Calcium/mg per 100g</b> (calcium content can differ according to type and cooking/preserving techniques)
<b>Cereals</b>	
Fortified cereal	137 - 1000 Read the label as it depends on the brand
<b>Milk</b>	
Soy	None naturally must be fortified with <b>calcium carbonate</b> 120
Almond	120
Cashew	120
Coconut	120
Rice	120
Plant	117
Rice	48
<b>Meat alternative</b>	
Tofu	Varies from 31 - 2000 Read the label and only buy the tofu that has <b>calcium salt</b> on the label.
Tempeh	115
<b>SEEDS</b>	
Sunflower	57 - 87
Chia	179
Pumpkin (pepita)	78
Hemp	70
Sesame	975
<b>Nuts</b>	
Almonds	264
Cashews	40
Brazil	100
Pistachios	105
Peanut	55 - 105
Walnut	99
Pecan	70
Hazelnuts	150
Nut butter	35-45
<b>FRUIT-Dried</b>	
Dried figs	163
Currants	86
Prunes	72
Dried Apricots	61
Dried Peaches	38
Goji Berries	53
<b>Fruit-Fresh</b>	
Oranges-Juice	140
Tangerines	37
Kiwi fruit	34
Mulberries	39
Blackberries	29
Guava	18
Pawpaw	20
Passionfruit	12
Apples	5
Bananas	8
<b>VEGETABLES</b>	
Broccoli	33 - 118
Kale	70 - 254

Sweet potato	15 - 80
Spinach	83 - 165
Green peas	25
Green Beans	24-60
Parsley	138
Okra	75-80
Bok choy	74
Cabbage	30-105
Snow peas	40
Butternut squash	30
Celery	40
Artichoke	55
Brussel sprouts	40
Silverbeet or chard	51
Kimchi	33
Sauerkraut	30
Parsnip	36
Carrots	25 - 40
Onion	23
Garlic (raw)	180
Tomato	11
Potato	7
seaweed	70
Wakame	150
<b>Beans &amp; Legumes</b>	
White beans	73
Edamame	145
Lima beans	50
Kidney beans	80
Lentils	40
Chick peas	99
<b>Starchy foods</b>	
Pasta (cooked)	13
White rice (cooked)	2
Naan	60
White bread	6 per slice
<b>Grains</b>	
Teff	180
Amaranth	159
Oats (uncooked)	350
Oat Bran	58
Quinoa	40
Buckwheat	40
Bulgur wheat	10
Oatmeal	300
Spelt	10
Pearl barley	29
Brown rice	30
Couscous	8

## Should you take calcium supplements?

There are two main types of calcium in supplements are carbonate and citrate. Calcium carbonate and calcium carbonate.

### What's the difference?

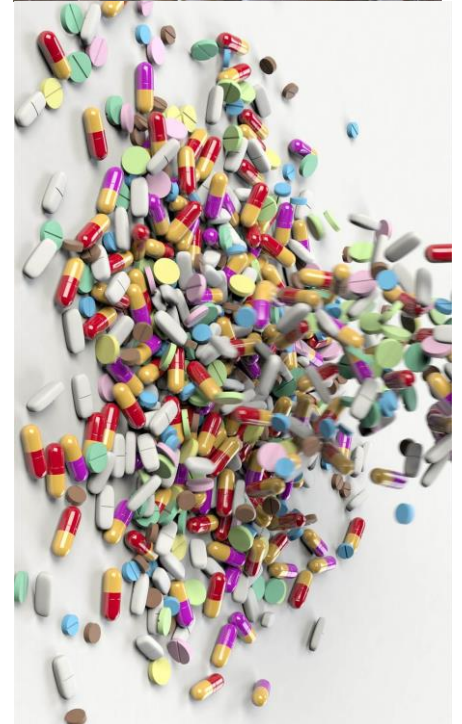
**Calcium carbonate** should be taken with food so it is absorbed properly and is usually the less expensive one.

**Calcium citrate** is absorbed well when taken with or without food and is often used for those with illnesses like inflammatory bowel disease or other gastrointestinal disorders where absorption is a problem.

Calcium is a funny one as the % of calcium absorbed depends on the total amount of elemental calcium consumed at one sitting. The more you eat the less that is absorbed. The best amount to eat at once is  $\leq 500$  mg. Here's an example. If you have 1,000 mg/day of calcium from supplements then split the dose and have it twice across the day.

### You can help your body absorb calcium easier by:

- Making sure you have enough vitamin D in your diet or if you have a supplement make sure it has vitamin D in it. Vitamin D can be found in foods fortified with vitamin D (orange juice, soy milk, and cereals), mushrooms, eggs (for vegetarians) and tofu.
- Or just get 10 mins of sunshine each day on your skin.
- Stop smoking. Smoking reduces bone mass and increases fracture risk.
- Reduce the amount of salt in your diet as this can also inhibit calcium absorption.
- Don't have excess caffeine and alcohol in your diet as this can reduce the absorption of calcium.



- Try not to have calcium with greens and cereals as they are often high in oxalates and phytates which can inhibit the absorption of calcium.
- If you have a medical condition, for example, coeliac disease or kidney disease or you are on medications like prednisone or prednisolone then you need to ask your GP and dietitian to get advice about your calcium levels and see if you may need a supplement.
- Get physical. Physical movement or exercise has been shown to increase or preserve bone mass density and to decrease the risk of falls as you age. Weight lifting and resistance training are particularly good as it helps with new bone growth, bone density and bone health. Weight and strength training can increase bone size, reduced inflammation, protect against bone loss and increase muscle mass.

Having a varied diet that includes fruit, vegetables and a protein source can be beneficial to your health overall. Maintaining your mobility and staying active in life will also help your body and your bones as you age.



## References

- Cormick, G., & Belizán, J. M. (2019). Calcium Intake and Health. *Nutrients*, *11*(7), 1606. doi:10.3390/nu11071606
- Dai, Z., Zhang, Y., Lu, N., Felson, D. T., Kiel, D. P., & Sahni, S. (2018). Association Between Dietary Fiber Intake and Bone Loss in the Framingham Offspring Study. *Journal of bone and mineral research: the official journal of the American Society for Bone and Mineral Research*, *33*(2), 241-249. doi:10.1002/jbmr.3308
- Whisner, C. M., Martin, B. R., Nakatsu, C. H., Story, J. A., MacDonald-Clarke, C. J., McCabe, L. D., . . . Weaver, C. M. (2016). Soluble Corn Fiber Increases Calcium Absorption Associated with Shifts in the Gut Microbiome: A Randomized Dose-Response Trial in Free-Living Pubertal Females. *J Nutr*, *146*(7), 1298-1306. doi:10.3945/jn.115.227256

<https://www.nrv.gov.au/nutrients/calcium>