

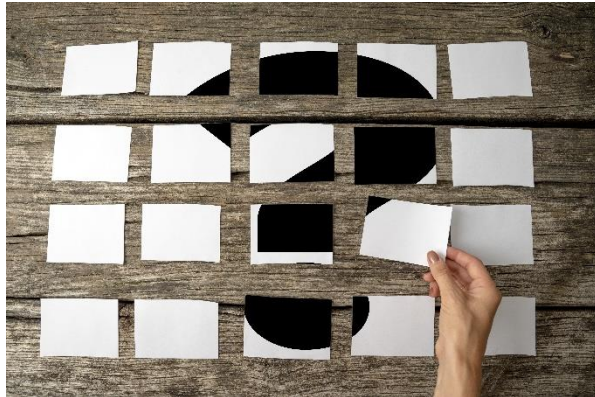
# Calcium Demystified for Better Bone Health

*The Curious Case of the Calcium Conundrum*

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## What Exactly is Calcium?



We all hear that we need to make sure we're "getting enough calcium" but what exactly is calcium and how in the world do we get more of it?

Calcium, the most abundant mineral in our body, resides primarily in our bones and teeth. It is actually a soft, gray metal, in the form of calcium salts.

Calcium is also found in limestone and seashells.

The word calcium comes from a Latin root meaning "lime." And although famous for being in bones and teeth, technically almost every cell in our body uses calcium. Who knew that calcium helps muscles contract, it helps our heart maintain a regular heartbeat, and help keep our blood pressure in a normal range?

Without a doubt, calcium is incredibly important to our overall health and well-being.

## What Does Calcium Do?

Over 99% of calcium in our bodies hangs out in our bones and teeth as clever little storehouses. If calcium is needed other places in the body, where does it come from? You guessed it. The body system with the need will make a withdrawal from the bones. And if too much is withdrawn without replacement, the bones can become porous and less dense, making us susceptible to bone mineral density disease Osteoporosis.

The body's need for calcium varies at different life stages, peaking in the teen years. Dr. Tieraona Low Dog, MD, brilliant medical doctor, researcher, teacher, herbalist, and Chair of the US Pharmacopeia tells a story in her book *Fortify Your Life, Your Guide to Vitamins, Minerals and More* tells how one of her attending physicians in her medical training said, "Osteoporosis is a disease of childhood that manifests in old age." Rarely does anyone mention the fact that we need to build the bone we need for the rest of our life by age 25-30. After this age, there is an accelerating rate of bone loss.

Hence why we want to make sure we have adequate calcium intake. The more the body takes calcium from the bones, the weaker the bones become. In addition to sufficient calcium, there is a team of "other players" necessary for building and maintaining healthy bones and teeth. Specifically, vitamins D and K, magnesium, and trace minerals. Also necessary for bone health regular exercise, adequate protein, and other healthy lifestyle behaviors.



## What are the Different Forms of Dietary Supplement Calcium?

Calcium carbonate: The cheapest and most highly concentrated form. Must be taken with meals to ensure absorption. It can be constipating.

Calcium citrate: Recommended for those over 50, those who have a history of kidney stones, those taking acid-blocking meds. Does not have to be taken with food and is less likely to produce intestinal gas or constipation.

Calcium citrate-malate: Another combination that's widely available and tolerated.

Calcium gluconate, calcium lactate and calcium phosphate: Each have low levels of calcium which would require a very large dose to be effective.

Coral calcium: Per Dr. Low Dog, "skip it. There are more environmentally friendly ways to get your calcium, so leave the coral alone!" Have to agree.

## Can Taking Too Much Calcium be a Bad Thing?

Short answer. Yes!

Dr. Low Dog tells the story of seeing 55 year old women taking 600 mg of calcium supplements twice a day, taking a multi with 200 mg of calcium all while getting 1000 mg a day through their diet. That adds up to a whopping 2400 mg a day! All the while the optimal calcium for women between 50 - 70 are recommended to get 1200 mg a day. Dr. Fishman, however, bumps that upper number to 1500 mg. So as with all things medical, it is best to check in with your medical health team for your specific recommendation.

## What Else Do I Need to Know?

You need sufficient Vitamin D and K, magnesium, zinc and trace minerals to be able to properly use the calcium that is available to them. Large doses of calcium can impair the absorption of trace minerals, so Dr. Low Dog recommends taking calcium two hours apart from taking a multivitamin, zinc, iron, etc.

## How Can I Predominately 'Have Food Be My Medicine?'



When it comes to the American diet, calcium is primarily consumed in dairy foods. But dairy is not optimal for many due to allergies, vegan lifestyle or simply not liking these products. Still others are avoiding dairy, especially milk, when breast cancer is a concern.

A report posted on PubMed in October 2020 reviewed a study cohort of 52,795 North American women, initially free of cancer, followed for 7.9 years. Dietary intakes were estimated from food

frequency questionnaires from six structured 24-h dietary recalls. At the end of the study participants (mean age of 57.1 years) 1057 experienced new breast cancer cases during follow-up. The study conclusion? *Higher intakes of dairy milk were associated with greater risk of breast cancer....Current guidelines for dairy milk consumption could be viewed with some caution.* That said, fermented dairy like cheese, yogurt, kefir, may be fine.

What about soy? Another place that the verdict is out. The same 52,795 North American women study found that: *No clear associations were found between soy products and breast cancer, independently of dairy.*

So we end with a definitive Maybe. Maybe Not.

## Are There Non-Dairy/Non-Soy Good Sources of Calcium?

Another resounding Yes! Vegetables and herbs to the rescue.

Vegetables: Calcium is found in veggies from the kale family – you know, cabbage, bok choy, broccoli, mustard, turnip greens. Now before you groan, recalling some yucky thing from your childhood, lets ‘give greens a chance.’ One cup of collard greens delivers a whopping 268 mg of calcium. It is amazing how much more I love fresh, lightly prepared veggies over some of the overcooked, over seasoned veggies of my past. And the GREAT news is that the calcium in these delights is every bit as ‘bioavailable’ (easily used by the body) as dairy. Spinach, though high in calcium, is also high in oxalate, which weirdly interferes with calcium absorption. This can be minimized by cooking the spinach before ingesting.

Fruit & Nuts: Dried apricots and almonds are good sources of bioavailable calcium. I’ve loved just dried apricots and almonds as a quick meal on the go long before I knew of their superpower calcium benefits. I recently tried out a recipe I found online for Apricot Almond No Bake Bars at <https://lovelylittlekitchen.com/bake-apricot-almond-bars/> and think they’re great.

What about fruits? Fortified orange juice tops the list, followed by whole Prickly Pear Fruit, Tangerines, Oranges, Kiwi, Mulberries and Blackberries.



### Herbs:

Our plant allies for health and wellness for centuries. And when it comes to calcium, hands down, *Urtica dioica* (Stinging Nettle), is amazing. Not heard of this incredible powerhouse of an herb? You’re not alone. It is not a common herb you’d find at Whole Foods, let alone your local Krogers. But fear not, excellent quality organic dried nettle is readily available through quality herb purveyors like Mountain



Rose Herbs, Pacific Botanicals, Frontier Co-Op, Starwest Botanicals and other purveyors of organic herbs.

But how does one use an herb like dried Stinging Nettle? It can be as simple as boiling water. And making tea. Just a Tablespoon of herb infused (steeped) in a cup of almost boiling water for 10 minutes makes a lovely, nutritious beverage of highly bioavailable calcium that is also loaded with magnesium, potassium, and silica.

And if you really want to go all out, put an ounce of the dried plant in a mason jar and pour boiling water over to fill the jar. Stir, cover, and let it sit for 4 – 12 hours. Then strain and voila! You have now officially made a Super Infusion which comes packing 500 mg of bone-building calcium goodness. And the good news is that it is also hailed as one of the most nutritious and safe herbal remedies around.

Two other great herbs to infuse or super infuse are *Avena sativa* (Oat Straw), which is equally well supplied with calcium, magnesium, and iron, and has an extra boost of silica and B vitamins; and *Equistrium arvense* (Horsetail – no that the tail of a horse, it's a plant) which has silica which is useful in building healthy bones, hair, and nails.

These three herbs can be enjoyed singularly or blended together for your “tea.” I always like to start out making just one herb at a time and then deciding if I want to blend them together. You can also add a little dried mint to your blend to further brighten the taste. And perhaps a spoon of raw honey for a sweet treat.

## **And That’s Just Scratching the Surface of This Incredible Mineral and Bone Health...**

Have questions or comments? Feel free to reach out directly to Susan at [susan@iPIVOT-now.com](mailto:susan@iPIVOT-now.com) We love to hear from our “Tribe” and invite you to join us. Be Strong. Be Well.

### **e-Book Sources:**

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