

OSTEOPOROSIS:

Building Strong Bones *Naturally*



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Nutrition & Supplements

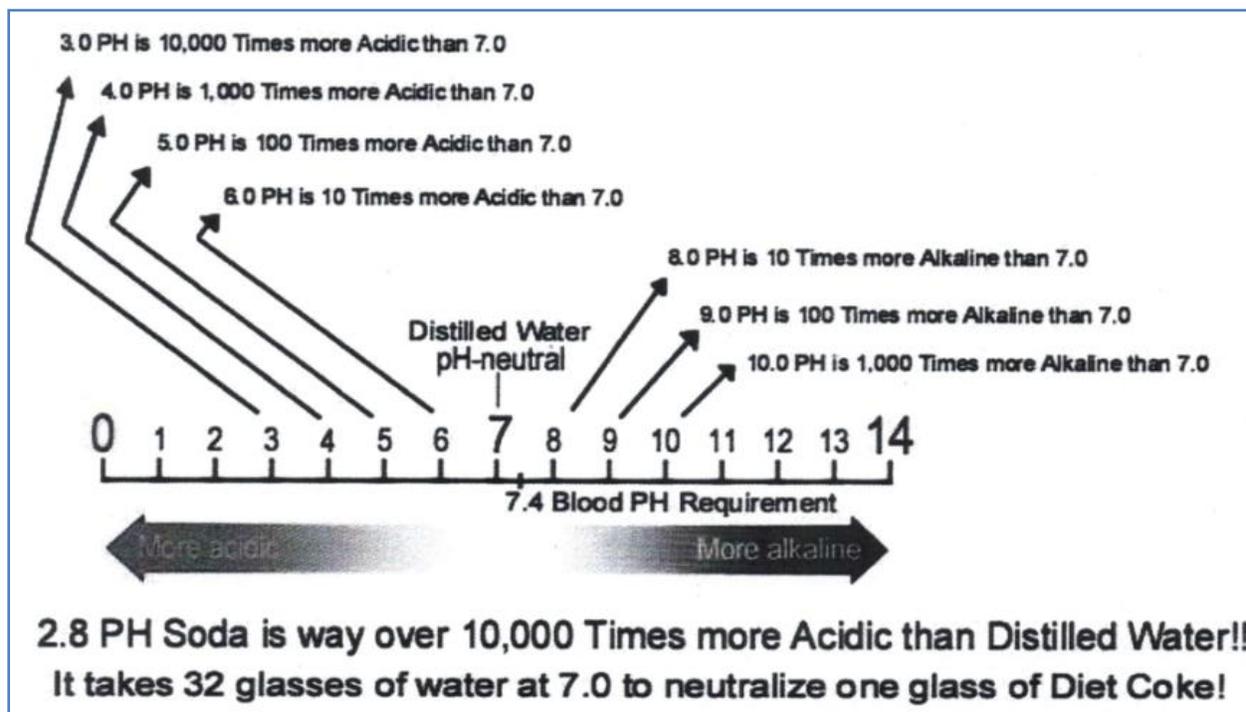
*“When diet is wrong, medicine is of no use,
when diet is correct, medicine is of no need.”*



PH Levels and Its Correlation to Bone Loss

- The body must maintain a 7.3 – 7.4 PH level.
- Food less than a 7.0 PH level are considered high acidic (the lower the number the MORE acidic).
- Calcium is alkaline. Magnesium is alkaline.
- After eating an acidic meal or drinking an acidic beverage the body will leach calcium from the bone and magnesium from the muscles to correct an overly acidic condition.

This information is NOT NEW... doctors have known about this for several years! Yet how many advise patients to eat an alkaline diet and to stay away from acidic beverages?



1. What foods & beverages are acidic?

For the most part animal products, coffee and soda are highly acidic.

2. What foods & beverages are alkaline?

Plant-based foods such as fruits, vegetables, most nuts and seeds, legumes, beans and grains.

Refer to the Alkaline / Acidic section of this handout for a complete list.

3. What nutrients build strong bones and what foods have these nutrients?

Let's first discuss Osteoblasts. This is a special cell in charge of growing new bone for you. Osteoblasts are your best friend to building strong bones.

Calcium (contrary to popular belief too much calcium is not good for the heart and can cause other issues). High amounts of calcium overburdens osteoblasts, leading to a LACK OF BONE REGENERATION! The bottom line: Excessive amounts of calcium causes osteoblasts cells to die prematurely. With that being said you do need to get some calcium from your diet. **Foods high in calcium include Sesame Seeds – especially BLACK, Chia Seeds, Almonds, Dark Leafy Greens, Quinoa, Beans, Broccoli, Oranges.**

Magnesium – As important as calcium and should be taken at the same time. It utilizes the calcium and over half of the magnesium in your body is stored in your bones.

Nature does this for us. Sesame Seeds, Chia Seeds, Almonds, Dark Leafy Greens and Beans are high in both calcium and magnesium.

Vitamin D3 – Difficult to get in foods, mushrooms, fish (salmon, tuna) and eggs have some but not enough. For this reason get 10 – 20 minutes of natural sunlight every day.

The body produces Vitamin D3 from sunlight in our body. D3 is best absorbed when taken with Omega-3.

Vitamin K2 – Considered the missing nutrient because it too is difficult to get in foods. Natto, a type of fermented soy is one of the only sources. Green leafy vegetables have K1 but not K2. K2 is extremely important for building strong bones.

Silica – This is one of the MOST important mineral for increasing bone density! Dr. Louis Kervran did a study with rats who had a broken femur bone. Those that were given silica healed very rapidly – within 17 days versus those who were only given calcium. Other foods that have silica include cucumbers and plums (the skin).

Horsetail, an herb, is the highest in silica and is taken as a supplement.

Zinc – Why zinc? Zinc is required for the proper functioning of an enzyme called alkaline phosphatase. This enzyme has a PH of 10 – very alkaline. It helps osteoblasts do their bone-building work. Zinc is crucial for D3 to get into the cells where it can work to build bone. ***Oysters, Pumpkin and black sesame seeds are high in Zinc.***

4. What supplements should I take to build strong bones?

Calcium – Plant-Based

Magnesium

Vitamin D3 – make sure it is D3!

Vitamin K2 – Make sure it is K2!

Zinc

Silica/Horsetail

Omega - 3

5. What is the Osteoporosis Protocol?

After the age of 40 the enzymes in your stomach begin to decrease. Enzymes break down proteins, fast, carbohydrates and soluble fiber. If your body cannot break down the food your body cannot absorb the nutrients. You could be eating very healthy, but not absorbing the nutrients. This protocol includes both Probiotics and digestive enzymes to ensure your gut is healthy and happy and can break down your foods to fully absorb all the nutrients.

All the supplements in the protocol you should be able to find in most health food stores. There are also many online stores that carry the supplements. As of this writing the best prices I have found online through SwansonVitamins.com.

It is important you look at ALL the supplements and vitamins you are currently taking to ensure you are not over or under loading. It is important the total amount of each supplement is in line with your total supplement/vitamin intake.

Here is the TOTAL amount for each supplement / vitamin for the Osteoporosis Protocol

- Probiotic: 15 billion / once per day – preferably with breakfast
- Digestive Enzymes / with each meal

Take the following supplements AT THE SAME TIME with breakfast OR lunch

- Calcium: 250 - 500mg (NO MORE THAN 500mg per day!)
- Magnesium: 250-500mg
- Vitamin D3: 2,000 –4,000 IUs
- Vitamin K2: 300mcg
- Zinc: 50mg
- Silica/HorseTail: 1200 – 2400mg
- Omega-3: 300-1000mg

NOTES:

Calcium – if you are eating calcium rich foods each day, then the amount taken in supplement form can be 250mg. Make sure the calcium is PLANT-BASED. It's better to stay on the LOW side. Contrary to popular belief, calcium plays a small part in building bone.

Magnesium – The amount of magnesium to calcium ratio should be 1:2 (1 part magnesium to 2 parts calcium) OR a 1:1 ratio.

Vitamin D3 – I suggest getting a Vitamin D blood test occasionally (1-2 times per year) to see if you are in the normal range. If you are outside in the sun for 10-20 minutes per day you may only need to take 2,000 IUs. If you live in an area where it is very cold or has very little sun you will probably need to take 4,000 IUs.

Silica/Horsetail – Begin with 1200 per day for about a week. Many times you will find tablets in 500mg dosages. You can take 1 tablet 3 times a day (breakfast, lunch & dinner). Silica/Horsetail is a diuretic and may cause leg cramps. If this occurs then get plenty of potassium in the foods you eat or take a potassium supplement. Slowly increase the amount of Silica/Horsetail to around 2400mg per day.

Where To Get Your Supplements

I find ordering supplements online is much cheaper than purchasing in the store and you will have many more choices than most stores.

My favorite online store is SwansonVitamins.com – every time I place an order they come in cheaper (same brands) than other online stores. Another online store that several of my clients choose is vitacost.com

Suggested Brands

If you are eating healthy and you are taking digestive enzyme with each meal there's very little need to take a multi-vitamin.

Here are a few suggested brands ... please know I am not in any way affiliated with any of these companies or brands.



- **Probiotic: 15 billion / day**
Renew Life Ultimate Flora



- **Digestive Enzymes / with each meal**
Source Naturals Daily Essential Enzymes OR
Rainbow Light Advanced Enzymes



- **Calcium: 500mg (NO MORE THAN 500mg per day!)**
- **Magnesium: 250mg**
Rainbow Light Food-Based Calcium

1 tablet is the 2:1 (calcium:magnesium) ratio. If you don't get much calcium from your daily diet this is a good brand to take.

If you are looking for a 1:1 ratio of calcium and magnesium take half or 1 tablet of the Rainbow Light Food-Based Calcium (above) and ALSO take 1 – 2 tsp of Natural Calm. Below is a picture of the Raspberry-Lemon flavor, it comes in other flavors as well.



NOTE: Too much magnesium will cause stomach cramping and loose bowels. Best to start with ½ - 1 tsp and work up to 2 tsp.

2 tsp will give you an additional 325 mg of magnesium, if you take 2 tsp with 1 tablet of the Rainbow Light Food-Based Calcium you would have a close 1:1 ratio.

You could also only take half of the Rainbow Light tablet and then 1 tsp of the Natural Calm and get a 1:1 ratio.



- **Vitamin D3: 2,000 – 4,000 IU's**
Nature's Way or Swansons



- **MK-7 Vitamin K2: 300mcg**
Now

MK-7 Vitamin K-2



- **Zinc: 50mg**
Finest Nutrition



- **Silica/Horse Tail: 1200 – 2400mg**
World Organic



- **Omega-3: 300-1000mg**
Natrol Glucosamine & Omega-3

There are more and more “blends” available these days... BE CAREFUL, most that are for “bone health” have too much calcium and some also have Strontium. Strontium is NOT in the protocol taking any more than only a few mgs a day has lead to many side effects. The bottom line is this: If you are looking at blends make sure you are not over or underloading.

One of my favorite blends that works well with the Osteoporosis protocol is Silica Complex from NOW.



Silica Complex:
NOW

This blend includes the following (per tablet):

Calcium 50 mg

Zinc 5 mg

Horsetail & Silica 615 mg

If you decide to take this blend your protocol will look like this:

Silica Complex – 2 tablets

Rainbow Light Calcium: Half – 1 Tablet

Natural Calm: 1-2 tsp

Vitamin D3: 2,000 – 4,000 IUs

M-7 Vitamin K2: 300 mcg

Zinc: 50 mg

Omega-3: 300 – 1000 mg

Do this for one – two weeks.

After one – two weeks do the following:

Silica Complex – 3 tablets
Rainbow Light Calcium: Half tablet
Natural Calm: 1-2 tsp
Vitamin D3: 2,000 – 4,000 IUs
M-7 Vitamin K2: 300 mcg
Zinc: 50 mg
Omega-3: 300 – 1000 mg

Do this for one week – if you begin to have leg cramps increase your potassium-based foods or begin to take a potassium supplement.

By week 4 you will change to:

Silica Complex – 4 tablets
Natural Calm: 1-2 tsp
Vitamin D3: 2,000 – 4,000 IUs
M-7 Vitamin K2: 300 mcg
Zinc: 50 mg
Omega-3: 300 – 1000 mg

In essence what you are doing is eliminating the need to take a calcium supplement – you will be getting enough in the Silica Complex and by eating a healthy diet.

MEALS

- Eat an alkaline-rich diet – see the chart at the end of this handout.
- Eat Mineral-Rich Salads (Watercress, Kale, Swiss Chard, Cucumber, Olive Oil, Fresh Lemon Juice)
- Get 15 – 20 minutes of sunlight every day
- Stay hydrated – drink plenty of water, lemon or cucumber water
- Avoid coffee, soda and other acidic foods and beverages

Cindy's Bones of Steel Smoothie Recipe

12 oz Unsweetened Hemp Milk
1 TBSP Black Sesame Seeds
1 tsp Spirulina
Fresh Ginger (size of small finger nail)
¼ Avocado
½ Cucumber (or 1 mini cucumber)
1 Stalk Celery
1 Cup Kale
1 Apple (with core and seeds)
¼ Lemon (with rind and seeds)
1 TBSP Coconut Oil

Combine all ingredients – except the coconut oil) and blend at the highest speed for 2 minutes. Add coconut oil and blend for 10 seconds.

Nutritional Information

Hemp Milk – Calcium, Magnesium, Vitamin D
Black Sesame Seeds – Calcium & Magnesium
Cucumber – Silica
Kale – Calcium, Magnesium and Vitamin K
Spirulina – Vitamin K, Iron
Lemon – Vitamin C – helps with the absorption of Iron
Coconut Oil – Helps with the absorption of minerals

Alkaline & Acidic Food List

Alkaline Foods – EAT PLENTY OF THESE

Alkalizing Proteins

- Almonds
- Amaranth
- Black Rice
- Brazil Nuts
- Fonio
- Hazelnuts
- Hemp Seeds
- Kamut
- Pine Nuts
- Quinoa
- Rye
- Sesame Seeds, Black
- Sesame Seeds, White
- Spelt
- Tef
- Wild Rice
- Walnuts

Alkalizing Grains

- Amaranth
- Black Rice
- Fonio
- Kamut
- Quinoa
- Rye
- Spelt
- Tef
- Wild Rice

Alkalizing Vegetables

- Amaranth greens (Callaloo)
- Avocado
- Bell Peppers
- Chayote (Mexican Squash)
- Cucumber
- Dandelion greens
- Garbanzo beans
- Izote (cactus leaf)
- Kale
- Lettuce (all, except Iceberg)
- Mushrooms (all, except Shitake)
- Nopales (Mexican Cactus)
- Okra
- Olives (and olive oil)
- Onions
- Poke salad -greens
- Purslane (Verdolaga)
- Sea Vegetables (wakame /dulse /arame /hijiki /nori)
- Squash
- Tomato – cherry and plum only
- Tomatillo
- Turnip greens
- Watercress
- Zucchini

Alkalizing Fruits

- Apples
- Burro Bananas (mid-size/ original banana)
- Berries
- Cantaloupe
- Cherries
- Coconut
- Currants
- Dates
- Elderberries (any form)
- Figs
- Grapes (seeded)
- Limes
- Mango
- Melons
- Oranges (seville or sour referred)
- Papayas
- Peaches
- Pears
- Plums
- Prunes
- Raisins
- Soft Jelly Coconuts
- Soursops
- Sugar apples (chermoya)

Alkalizing Seasonings

- Achioté
- Basil
- Bay leaf
- Cayenne
- Chili Pepper
- Cilantro
- Coriander
- Cumin
- Curry
- Dill
- Ginger
- Marjoram
- Onion Powder
- Oregano
- Powdered Granulated Seaweed (Kelp/ Dulce/ Nori)
- Pure Sea Salt
- Sage
- Sweet Basil
- Tarragon
- Thyme

Acidic Foods – EAT LIMITED AMOUNTS

Acidifying Proteins

- Beef
- Chicken
- Dairy
- Eggs
- Fish
- Lamb
- Pork
- Shellfish
- Turkey
- Veal
- Venison

Acidifying Grains

- Barley
- Bran (oat, wheat)
- Bread
- Corn
- Flour (wheat, white)
- Oatmeal
- Oats
- Rice (white, brown)
- Wheat

Acidifying Dairy

- Butter
- Cheese
- Ice cream
- Milk

Acidifying Fruit

- Cranberries

Acidifying Drinks – AVOID IF POSSIBLE

- Beer
- Coffee
- Juices (processed)
- Liquor
- Soda