OSTEOPOROSIS

The following information has been extracted from our wholistic library for your convenience.

Osteoporosis ("porosis bones") is a systemic(affects the whole body) skeletal disease causing bone density loss. The deterioration of bone increases bone fragility and susceptibility to fracture. Hormone Replacement Therapy (HRT) has become the most commonly prescribed drug in the United States for treatment of maintaining bone mineral density. However, HRT is considered dangerous for long term use because of breast cancer, stroke and heart attack risks.

Refined foods, meat, dairy, caffeine, alcohol and using drugs and tobacco lead to acidic blood. Calcium is then leached out of the bones to act as a buffer to neutralize the acid and results in "thin" bones. A diet high in alkalinity is needed and weight bearing exercise.

For Women the most common causing factors are:

- **Eating disorders**
- **Delayed puberty**
- **Persistent amenorrhea (missing menstrual periods)**
- **Low hormone levels or other glandular disorders**
- **Less than 15% body fat**
- **Very poor diet with malabsorption of Vitamin D, calcium and/or magnesium**
- **Gastrointestinal disorders that interfere with natural mineral absorption**
- **Heavy alcohol consumption**
- **Smoking**
- **Under (or over) exercising**
- **Using corticosteroids or other medical drugs like proton pump inhibitors**
- **Overactive thyroid or kidney disorder that hasn't been treated**
- **Bone cancers or other malignancies**

Men also can have osteoporosis (by far women have more indicators for osteoporosis than men). The risk factors for men over the age of 70:

- **being underweight**
- **physical inactivity**
- **previous fractures with minimal trauma**
- **long term use of certain drugs such as corticosteroids and drugs used to treat prostate cancer, anticonvulsant medications.**
- **spinal cord injury**
- **low calcium diet**
- **cigarette smoking**
- **low testosterone levels**
- **excessive alcohol consumption (more than 3 a day)**
- **chronic obstructive pulmonary disease and asthma**
- **cystic fibrosis**
- **gastrointestinal disease, hypercalciuria, thyrotoxicosis, hyperparathyroidism**
- **neoplastic disease**
- **ankylosing spondylitis and rhumatoid arthritis**
- **systemic mastocytosis**

Many now think that osteoporisis is not really a disease, but rather a reaction of the body trying to correct a biochemical imbalance.

GENETICS

Genetic factors may account for as much as 75% of a person's bone mass.

LOOK AT THE FINGERNAILS

Possible indicators of bone loss:

- **White vertical lines appear on one or more of the fingernails and the nails begin to split along the white lines are commonly associated with a shortage of calcium within the body.**
- **Brittle fingernails and their colour turns to a pale white.**

NEW THOUGHTS

Although we still don't know everything about growing better bone density, new information is giving us new approaches. We understand that new bone is stronger than old bone, so growing new bone is desirable. But old bone also provides its own special strength and therefore both are needed. Treatment with drugs like Fosamax, Actonel, Boniva, and Reclast that only treat bone density might not necessarily prevent fractures in the long term because although they make the old bone harder, they disrupt the normal remodeling process by inhibiting osteoclast (new bone) formation. The side effects of these drugs can be very uncomfortable and many people have to stop taking them.

Bones strengthen with use and you can help to strengthen your bones at any time in your life, including during and after menopause. Although bone growth best occurs during puberty and peaks between ages 20-30, at some point in the mid to late 30's bone loss or resorption slowly beings to outpace bone formation and this speeds up after menopause for women.

Our astronauts find that without gravity providing weight bearing pressure on the bones, they experience a bone density loss. They are now expected to do 3 hours of special exercises a day while in space to try and compensate.

Many are now thinking that thickened bones may be more prone to fracture than thinner, more flexible bones.

PARATHYROID GLANDS

The four parathyroid glands monitor the calcium in the blood 24 hr a day by making a parathyroid hormone in response to the levels of calcium. Increase of this hormone causes the bones to release their calcium into the blood and when there is lots of calcium in the blood, the glands stop producing the hormone.

The drug Forteo is a synthetically manufactured form of this hormone. Common side effects of Forteo are body aches, headaches, chest pain, constipation, difficulty swallowing, feeling lethargic, heartburn or pain upon swallowing, irritation or pain of the esophagus, muscle pain and weakness, increased sweating, skin rash, nausea and vomiting.

STRONTIUM

Recent studies show it contributes to bone thickening of the outer cortical bone. Our bodies natural contain between 320 and 400mg of strontium, a trace element chemically very similar to calcium. It is so similar that it competes with the calcium protein carrier in our blood so it is taken at least 4 hours after or before taking calcium. Calcium is the naturally occurring bone mineral that handles our bone strength, not strontium.

We don't really know of how we may be affecting the delicate mineral balance in our bones by taking supplements and drugs.

EXERCISE

Regular exercise, pref. weight bearing (walking, running, lifting weights, push ups, isometric, rowing, cross country skiing), is the best effective preventative measure a person can do. If you already have osteoporosis then exercise should begin very gently because otherwise brittle bones may break.

If you can't get to a gym and don't have the space or money to have weight bearing equipment at home, do isometric exercises using your own body as the weight resistance.

Never exercise to the point of exhaustion. Too much exercise releases a lot of unwanted acidity from the tissues and can have a negative impact on your pH. Density training is based on the simple premise that it is best to do short repetitions of exercises with 'pit stops' at your own pace. This system allows you to manage your fatigue, resulting in a more effective workout. Example is to do 3 repetitions of an exercise, then rest for 10 seconds, then do another 3 repetitions, stop and rest 10 seconds. They also recommend alternating the exercises each day so you strengthen different key areas of the body.

We are fortunate in Medicine Hat to have OsteoStrength, a clinic where high quality machines have been developed to build bone mass as well as help muscle degeneration, and are available at a relatively low cost to the public. (403) 548-0000

For stress reducing, try learning guided imagery, yoga or tai chi.

BREATHING in regularly and deeply, directing the breath to your collar bones (sounds strange, but many that have tried it say it works). This will then go directly to building bone density up.

DAIRY PRODUCTS

Observing the different cultures in the world, it appears that the countries with the highest consumption of dairy products have the highest rates of the calcification form of heart disease and osteoporosis in the hip area. The lowest consumption countries eg. Japan, have lower levels of osteoporosis, heart disease and cancer. It should be noted that high amounts of animal protein such as Alaska, Northwest Territories where very little fruit and vegetable is eaten and the diet consists mainly of wild animals, seal, fish, have the worse osteoporosis.

African women living in the United States eat 4 or more times the calcium than African women in Africa and have 9 times more osteoporosis. Asian women in the U.S. eat at least 60% more calcium than women in Asia, and have 9 times more osteoporosis.

Post menopausal women that eat calcium rich dairy products have over 3 times more osteoporosis diagnosis than those who don't.
Women drinking 2 or more glasses of milk a day increase their risk of fractures compared to those who drink less than one glass per week.

Unsweetened cultured or soured dairy products are mostly neutral pH (eg. Plain yogurt, kefir, raw milk, sour cream). You can use honey to add flavour. What is acidifying is butter, cheese, ice cream, pasteurized milk and sweetened yogurt.

There is a direct relationship between bone loss and body acidity (pH). When acid levels in the diet are high, the body neutralizes the acid by taking the calcium from the bones. This has nothing to do with the taste of food, it refers to the acid residue the foods leave after they metabolize.

THE pH FACTOR

The acid/alkaline imbalance as mentioned, is the reason why calcium seeps out of the bones. The blood, lymph and cerebral spinal fluid in the human body is designed to be slightly alkaline (pH between 7.35 and 7.45). A pH of 6.4 to 6.5 showing up at the same time in the urine and saliva is ideal for optimal health. We need to understand the mechanism of why the body ends up with too much acid residue.

The body will do everything within its power to maintain the proper pH range. First it uses the readily available supplies such as the food we eat, and if there is a shortage of alkaline producing foods ingested, it will dip into the body's alkaline reserves. It doesn't want to damage the blood and risk killing the body, and salt which is also alkaline, doesn't store very long in the body, but the bones have lots of calcium, and taking the calcium out to neutralize the acid, although may hurt the body in the long run, temporarily doesn't cause a lot of problem.

Why is it necessary to buffer the acidity? An acid body makes for unhealthy mechanisms and when the urine drops below pH 5, irreversible damage can be caused to the genitourinary tract. In addition research has shown that people store acid waste in their fatty tissue instead of properly excreting it and that becomes highly inflammatory and corrosive.

Remember, that a typical North American diet is high in protein, processed foods, sugar, dairy products and chemicals, which are the main culprit of the osteoporosis epidemic because these foods plus all the preservatives, food dyes, taste enhancers and phony sugars are very acid forming.

Back to Dairy products. The pH of pasteurized milk and dairy products ranges from 2 to 4, with the lowest most acidic being pasteurized processed milk, sweetened yogurts and other processed dairy foods. Even though dairy products contain calcium, due to the acidic pH they actually cause bone loss.

The less animal protein you consume, the less calcium you'll eliminate via the urine.

SALT

Table salt is acidifying. However, sun dried sea salt without additives is alkalizing and naturally rich in calcium, potassium, sulphur, magnesium, iron, phosphorus, manganese, copper, iodine and zinc. Over 25% of sodium in the human body is in the bones. Other pure sources of salt are Himalyan salt, Hawaiian Salt and Celtic Salt. Low sodium levels cause muscle cramps, faintness, fatigue and in severe cases, convulsions and death. Too much salt can cause high blood pressure and kidney issues.

LIQUIDS

Avoid acidifying beverages that can delete calcium from the bones. The most damaging are soda, especially cola, and all dairy drinks. Regular soda and diet soda are damaging because of the high sugar or artificial sweetener content. Cows' milk is rich in phosphorous (like soda) and this mineral can combine with calcium and prevent the absorption of calcium present in other foods you are eating, so it causes double damage tot he bones. Milk protein, like all animal derived protein, also accelerates calcium excretion through the kidneys.

Best choices of liquid to drink are distilled water, or reverse osmosis water. You can add a few drops of lemon juice to these if you wish. Distilled water with lemon juice cleanses your body of acidic residue and because of its negative electrical charge, drags out toxins via the urine.

Avoid drinking tap water where toxic chemicals such as fluoride and chloramines have been added.

FOODS TO INCLUDE IN YOUR DIET

- **Distilled water (4-6 glasses daily)**
- **All vegetables (with the possible exception of those listed below). Food have a greater alkalizing effect when consumed in their most natural state (fresh vs. canned)**
- **Fish**
- **Honey, Pure Maple Syrup**
- **Most raw nuts and seeds**
- **Fruits, esp. cherries, blueberries, black currant, apples, plums,**
- **Carrots, yams, soy products, coconut, brown rice, barley, oats.**
- **Firm tofu**
- **Herb Teas**
- **Whey protein is the only alkalizing animal derived complete protein, boosts the immune system**
- **Sea weeds (wakame, kombu, hijiki, kelp)**
- **Limited amounts of:**
  Whole grains Bran Parsley Cashews Almonds Beet greens

FOODS TO AVOID:

- **Beef, Pork**
- **Refined foods**
- **Wheat products/by-products**
- **Chocolate**
- **Sugars or any type and foods that contain sugars**
- **Alcohol (limited amount only)**
- **Coffee, caffeine foods or drinks. And decaffeinated drinks also.**
- **Teas – all except herbal**
- **Alcohol**

- **Dairy products except as outlined**
- **Aluminum containing antacids**
- **High acid ash diet (meat and other high protein foods, most cereal grains and other starches) which increases calcium excretion and bone loss**
- **High oxalic foods: chard, spinach, rhubarb,**

DAILY SUPPLEMENTS TO TAKE:

- **Calcium Citrate Supplement. Should also have Magnesium with it (50% of amount of calcium). If low stomach acid also take digestive supplement with hydrochloric acid in it. Avoid calcium from inorganic sources such as limestone and rocks. Calcium citrate is easier to digest and better absorbed. Avoid coral calcium, dolomite, hydroxyapatite in case of heavy metal contamination. Organic sources as minerals from foods are better utilized than isolated inorganic mineral salts or chelates. 800-1,200 mg per day.**
- **Magnesium, as mentioned with Calcium, is equally important. Magnesium regulates the parathyroid gland, the primary organ that controls bone mineralization. 320 mg per day (minimum)**
- **Zinc is found in the hydroxyapatite mineral crystals and regulates bone turnover. Produced in the liver and thanks to its pH of 10, bone alkaline phosphatase helps osteoblasts in the bone building process and is necessary for Vit. D performance. 8mg women 11 mg men minimum**
- **Vit. B complex, especially B6 B12 and folic acid. Get at least 100 mg/day of pyridoxine (B6).**
- **Vit K (best dietary source is green leafy vegetables and chlorophyll or it can be supplemented with 1 mg/day.**
- **Omega 3 fatty acids, increase levels of glutathione, support bone and joint health and many other wonderful benefits. If you need as anti-inflammatory, take on empty stomach.**
- **CoQ10 (ubiquinol) daily – 50 mg**
- **Boron is a trace mineral activates certain hormones, especially estrogen (negligible increase only). It is involved in bone metabolism and Vit. D activity, reducing the amount of urinary clacium and magnesium excretion.**
- **Vit. D. 1000-2000 IU/day or 20 min. exposure of sun to face or body each day**
- **500 mg Vitamin C with each meal**
- **Copper, Manganese, Silicon are also minerals important to bone health.**
- **Lycopene fights bone loss, seems to stimulate osteoblasts. Lycopene is the substance that gives certain foods their red colour.**

Substitute milk with almond milk, rice milk or organic soy milk. Keep soy milk use to a minimum as unfermented soy has phytic acid.

Use extra-light olive oil for cooking. Olive oil is really a fruit juice, thus is alkalizing as well as being healthy.

Here is a simple list of foods both acid and alkaline. We are shooting for obtaining a 80/20 ratio: eating 80% of our foods alkaline or neutral, and 20% acidic. So if you are having a pasta dish or a fish dish, you will want to have an abundance of vegetables to balance out the meal.

Diet should be 80% alkaline/neutral 20% or less should be acid

Note: what makes a food more alkaline is the presence of organic minerals

ACID-FORMING - ALKALINE-FORMING FOODS

Acid-Ash	Alkaline Ash	Neutral Starches
– eat 20% or less –	*---------- eat 80% or more ----------*	
from this column	*from these columns*	
Beef, Veal	Dates and figs	Asparagus
Venison	Honey, Stevia	Celery
Lamb	Nuts: Almonds, chestnuts	Collards
Rabbit	Raisins	Cabbage
Pork*, Bacon*, Ham*	Pumpkin and Squash	Lettuce
Organ meats	Tomatoes (fresh)	Beet tops
Poultry (turkey, chicken, duck)	Apples	Endive
Most fish (cod, pike, salmon)	Grapes	Broccoli
Sea foods (shrimp, mussels, lobster, scallop)	Pears	Green Peas
Eggs (whole)	Pineapple	Beans: Soy, lima, green
Butter, cheese, milk*	Beets	Watercress
Yogurt (sweetened)	Melons	Chives
Barley, Wheat, Oats, Rye	Bananas	Cucumbers
Wheat germ, Brans	Cherries	Mustard, Kale
Rice - white*	Apricots	Garlic
Most whole grains	Cantaloupe	Eggplant
Cooked prunes	Watermelon	Radishes
Cheese	Brown rice	Onions
Lentils	Millet	Carrots
Cooked tomatoes	Buckwheat	Spinach
Cooked rhubarb	Almonds	Green Peppers
Coffee*	Potatoes, baked	Leeks
Beans: kidney, pinto, red, white, black, garbanzo	Popcorn	Lettuce, Escarole
Dried peas, beans	Okra, sorrel	Kohlrabi,
Corn, corn syrup	Macaroni	Avocado
Carob	Flour gravy*	Peppermint
Nuts: brazil, cashew, hazelnut, peanut, pecan	White Flour*	Escarole
Processed fruit drinks*	Spaghetti	Dandelion
Alcohol, wine pop, beer	Cereals, processed*	Root celery
White Sugar, fructose*	Apple Cider Vinegar	Artichokes
Artificial Sweeteners*	Chili Pepper	Parsley
Cranberry, blueberry	Millet, Quinoa, Spelt	Brussel Sprouts
Plums, Prunes	Fermented Tempeh	Parsnips, Rutabaga
Ice Cream*, Jam*	Fermented Tofu	Mushrooms
White vinegar	Whey Protein Powder	Buttermilk
Candy*, Cake*, Pie*	Ginger, Cinnamon, Curry	Nuts: almond, chestnut
Molasses, Maple Syrup	Sea salt, Herbs	Seeds: flax,pumpkin,sesame, sunflower
Oils: butter, hemp, flax, lard	Fresh fruit juice, veg. juices	Most oils, esp. recommend Olive oil
Nutmeg, Table salt, MSG	Miso, Tamari	Bee Pollen
Mayo, ketchup*, cocoa	Apple Cider Vinegar	Lecithin granules
Black tea*, green tea*		Arrowroot powder
Drugs*		
Tobacco*		

*** not recommended**

CALCIUM SUBSTITUTES

Although we don't recommend drinking milk, there are lots of good sources of calcium that you can include in the diet:

Herbs:

Horsetail grass
Oat Straw
Comfrey Root
Lobelia

Foods High in Calcium – also noted is the iron content

Note: Milk (100g) contains only 118 mg calcium and .5 mg iron

	Calcium	Iron
Kelp, bok choy	1093	100
Sesame seed	580	5.2
Turnip greens	259	2.4
Collards	249	1.6
Kale	225	2.2
Mustard greens	220	2.9
Hazelnuts	195	2.0
Parsley	193	4.3
Dandelion	187	3.1
Brazil nuts	186	3.4
Chick peas	92	7.1
Black olives	87	1.6
Walnuts	83	2.1
Spinach	81	3.0
Raisins	78	3.3
Peanuts	74	1.9
Lentils	59	7.4
Pumpkin Seeds	51	11.2

OTHER FOODS HIGH IN CALCIUM: Sardines with bones, Tuna with bones, Sunflower seeds, Egg yolk, Broccoli, Mustard greens, Flaxseeds, Cabbage, Tofu, Lima Beans, Walnuts, Halibut, Mackerel, Salmon, Okra, Almonds.

EGGSHELLS FOR CALCIUM?

Eggshells dissolved in lemon juice or apple-cider vinegar are great sources of calcium and trace elements. Eggshells can be used to sweeten vinegar and lemon juice by neutralizing the acid so that sugar is not needed.
Eggs allowed to stand for 24 hours in either cider or wine vinegar will have a soft shell. The whole egg can then be thrown into the blender to make an eggnog. Do not use white vinegar which is only diluted acetic acid. The eggshells can then be recycled to fill human calcium needs.
When eggshells are used to sweeten cider or wine vinegar the calcium is then in the vinegar as calcium acetate.
Since the vinegar is less sour and is now loaded with natural trace elements it will be more nutritious when used in salads or to make homemade mayonnaise.

Sources of Magnesium

Magnesium is difficult to get in regular food because farmers do not put this back in the soil once it is extracted by the current crop. However these are the best sources.
Alkalizing: Spinach, pumpkin seeds, almonds, lima beans, swiss chard, bananas, plantains
Acidifying: oat bran, brown rice, halibut, scallops, black beans, whole wheat bread.

Sources of Zinc:

Alkalizing: pumpkin seeds, almonds, yogurt
Acidifying: chickpeas, peanuts, cashews, tahini, dark chocolate, beef, turkey.

Sources of Boron:
Alkalizing: almonds, dried apricots, avocado, raisins, dates, grapes, peaches, oranges, pears, bananas, broccoli, carrots, celery, onions, honey.
Acidifying: peanut butter, hazelnuts, cashews, walnuts, red kidney beans, chickpeas, lentils, prunes.

Sources of Copper:
Alkalizing: almonds, sunflower seeds, sesame seeds, pumpkin seeds, mushrooms, tomatoes.
Acidifying: beef liver, unsweetened cocoa powder, dark chocolate, cashews, brazil nuts, pecans, walnuts, peanuts.

Sources of Manganese:
Alkalizing: artichokes, lima beans, pineapples, pumpkin seeds, spinach, strawberries, sweet potatoes.
Acidifying: pecans, peanuts, brown rice, whole wheat bread, oats pinto beans, garbanzo beans.

Sources of Silicon:
Alkalizing: cucumbers, bell peppers, tomatoes, romaine lettuce, spinach, beets, pumpkins, carrots, onions, cabbage, cherries, apples, oranges, raisins, almonds, honey
Acidifying: brown rice, rice bran, oats, alfalfa, barley, beer

Sources of Vitamin D:
Alkalizing: none, sunshine is the best source of this vitamin
Acidifying: salmon, mackerel, sardines, unrefined cod liver oil.

Sources of Vitamin K:
Alkalizing: spinach, brussel sprouts, green beans, asparagus, green peas, romaine lettuce, bell peppers, dale, swiss chard, watercress, broccoli, parsley.
Acidifying: none

Sources of B Complex:
Bananas, chili peppers, avocado, kefir
Acidifying: beef, liver, turkey, tuna, eggs, lentils, brewer's yeast, wheat germ, brown rice, oats, peanuts, brazil nuts.

Sources of Vitamin C:
Alkalizing: oranges, grapefruits, lemons, limes, tangerines, strawberries, raspberries, pineapple, watermelon, papaya, guava, kiwi, cantaloupe, cabbage, tomatoes, broccoli, cauliflower, sweet red bell peppers, brussel sprouts parsley.
Acidifying: cranberries, blueberries.

Sources of CoQ10
Alkalizing: none
Acidifying: fish, liver, organ meats (liver, kidney), wheat germ

Antioxidants (prevents damage to the bone)
Glutathione: artichokes, asparagus, avocados, broccoli, cauliflower, garlic, grapes, kiwis, oranges, spinach tomatoes, walnuts.

HOMEOPATHIC FOR BONES
Calcarea Carbonica is for women who are often heavy with lack of tone to their muscles. Thy may be cold and clammy and perspire a lot at night. They are usually busy and often lie awake at night worrying about things. There may be cravings for eggs, sweets, dairy which often don't agree with then and they feel weary, have lack of stamina and poor health in general.

Calcarea Phosporicum and Calcarea Fluorica are tissue salts of particular minerals which are helpful for bone loss. The person who needs Calc Phos tends to be leaner than the Calc Carb person mentioned above. She might have history of slow dentition, lots of cavities as a child. May be anemic, crave salt or smoked meats. This person will have spinal spasms, curvatures and pain, sometimes with numbness. Calc Fluor is often used in conjunction with Calc Phos to help bone repair. It has a greater affinity to the external structures of bones and teeth.

Silicea should be used by those tired and limp, profusely sweating at night, are chilly. Thy have no self-confidence or drive. Silicea has great affect on the connective tissue which is the essence of bone.

If your body's pH is too acidic, the body's intelligence will look for a source of alkalinity to bring the pH up to be more alkaline and balanced. It can't touch the blood without doing a lot of damage, so it looks for a different source – the bones which are made of calcium, a rich alkaline source.
So one of the things you can do to help the body maintain a healthy balance, is to avoid ingesting foods and drinks that create an acid pH: coffee, black tea, sugar, artificial sugars, meats (esp. red meats).
Here is a chart giving the pH of metabolized foods to help

FOODS MOST ALKALINE PRODUCING	
Lemons	7.5pH
Watermelon	7.5
Melons, all	7.0-7.5
Agar Agar	7.0
Cantaloupe	7.0
Cayenne	7.0
Parsley	7.0
Kelp	7.0
Figs, dried	7.0
Dates, dried	7.0
Grapes-thompson	7.0
Limes	7.0
Mango	7.0
Papaya	7.0
Parsley juice	7.0
Seaweed, all	7.0
Watercress	7.0
Wheatgrass juice	7.0
Asparagus	6.5
Miso	6.5
Passion fruit	6.5
Pineapple	6.5
Raisins	6.5
Fruit juices	6.0-7.0
Pears	6.0-6.5
Alfalfa sprouts	6.0
Apricots	6.0
Arrowroot flour	6.0
Bananas, ripe	6.0
Berries (except blueberries)	6.0
Carrot juice	6.0
Celery &/or juice	6.0
Chard	6.0
Currants	6.0
Dandelion greens	6.0
Dates, fresh	6.0
Figs, fresh	6.0
Garlic	6.0
Gooseberry	6.0
Grapes	6.0
Grapefruit	6.0
Guavas	6.0
Lettuce	6.0
Nectarines	6.0
Persimmons	6.0
Rutabaga	6.0
Spinach	6.0
Tangarines	6.0
Apples	5.5-6.0
Peaches	5.5-6.0
Peas(fresh)	5.5-6.0
Pumpkin	5.5-6.0
Teas, herbal leaves	5.5-6.5
Bamboo shoots	5.5
Beets/juice	5.5
Broccoli	5.5
Cabbage	5.5
Carob	5.5
Cauliflower	5.5
Corn	5.5
Daikon	5.5
Ginger, fresh	5.5
Greenbeans,fresh	5.5
Green onions	5.5
Kale	5.5
Kohlrabi	5.5
Lettuce,iceberg	5.5
Lima bean, fresh	5.5
Mustard Greens	5.5
Oranges	5.5
Parsnips	5.5
Pepper, bell	5.5
Pomegranate	5.5
Potatoes	5.5
Strawberries	5.5
Tamari Sauce	5.5
Turnip	5.5
Squash	5.0-6.0
Almonds	5.0
Barley malt sweetener	5.0
Brown rice syrup	5.0
Brussel sprouts	5.0
Cherries	5.0
Chicory	5.0
Coconuts, fresh	5.0
Cucumber	5.0
Eggplant	5.0
Leeks	5.0
Okra	5.0
Olives	5.0
Pickles	5.0
Radishes	5.0
Seasalt	5.0
Taro	5.0
Waterchestnut	5.0
Artichokes	4.5-5.0
Mushrooms	4.5-5.0
Onions	4.5-5.0
Teas(herbal)	4.5-5.0
Tomato	4.5-5.0
Amaranth	4.5
Chestnuts	4.5
Egg yolks	4.5
Essene bread	4.5
Goatmilk, raw	4.5
Granola	4.5
Horseradish	4.5
Millet	4.5
Olive Oil	4.5
Quinoa	4.5
Rhubarb	4.5
Sesame seeds	4.5
Soybean product	4.5
Soy sauce	4.5
Whey, goat	4.5
Acidolphilus	4.0
Almond oil	4.0
Avocado oil	4.0
Butter, unsalted	4.0
Canola oil	4.0
Castor oil	4.0
Corn oil	4.0
Cranberries	4.0
Cream, fresh/raw	4.0
Margarine	4.0
Safflower oil	4.0
Safflower oil	4.0
Sesame Oil	4.0
Soy oil	4.0
Sunflower oil	4.0
Whey, cow	4.0
Yogurt, plain	4.0
Raw cows milk	3.5-4.0
Butter, salted	3.5
Aduki beans	3.5
Black beans	3.5
Blueberries	3.5
Bread: Sprouted millet	3.5
Brazil nuts	3.5
Broadbeans	3.5
Cheese, mild	3.5
Cheese, crumbly	3.5
Dried beans	3.5
Egg whites	3.5
Garbanzo beans	3.5
Goatmilk, homo	3.5
Kidney beans	3.5
Mung beans	3.5
Navy beans	3.5
Pecans	3.5
Pinto beans	3.5
Plums	3.5
Prunes	3.5
Red beans	3.5
Spelt flour	3.5
White beans	3.5
Barley	3.0
Bread: Sprouted rye	3.0
Cheese, med.	3.0
Chicken fat	3.0
Cornmeal	3.0
Filbert nuts	3.0
Fruit juice	3.0
Honey	3.0
Macadamia nuts	3.0
Maple Syrup	3.0
Milk, homo	3.0
Molasses (org)	3.0
Pistachios	3.0
Rye flour	3.0
Lentils	3.0
Sunflower seeds	3.0
Turbinado sugar	3.0
Walnuts	3.0
Beef fat	2.5
Buckwheat	2.5
Cheese, sharp	2.5
Eggs	2.5
Ketchup	2.5
Mayo	2.5
Pasta,wholegrain	2.5
Pastry, whole grain/ Honey	2.5
Rice, basmati	2.5
Rice, brown	2.5
Oats (steelcut)	2.5
Peanuts	2.5
Bread: Wheat sprouted	2.5
Tapioca	2.5
Fructose	2.0
Molasses, refined	2.0
Pork fat	2.0
Shellfish	2.0
Wheatgerm	2.0
Wheat, whole	2.0
Wine	2.0
Yogurt, sweet	2.0
Fish	1.5-2.0
Chicken (organic)	1.5
Deer	1.5
Pheasant	1.5
Rabbit	1.5
Turkey	1.5
Wheat (white)	1.5
Pop	1.0-3.0
Black tea	1.5
Pasta (refined)	1.5
Beer/liquor	1.0-2.0
Coffee	1.0-2.0
White rice	1.0-1.5
Bear meat	1.0
Beef, organic	1.0
Goat	1.0
Lamb	1.0
Pastry (refined flour with sugar)	1.0
Pork	1.0
Soft drink with Artificial sweeteners	1.0
Sugarcane	1.0
Artificial sweeteners	.5pH

FOODS MOST ACIDIC PRODUCING

Weight bearing exercises also help put pressure on the bones, encouraging them to be strong. You don't have to go to a gym to use weights for exercise. You can buy 5pd weights online or perhaps at a sports store which will be fine.

Make sure you have Vitamin D in your diet or regime. Taking 4,000 IU daily should be helpful.

Taking a calcium-magnesium supplement in the evening is helpful and some may have added boron or Vitamin K, or silica to strengthen the bones.