Moving Chi

News & Information

April 2025

Osteoporosis

Overview

Osteoporosis causes bones to become weak and brittle — so brittle that a fall or even mild stresses such as bending over or coughing can cause a break. Osteoporosis-related breaks most commonly occur in the hip, wrist or spine.

Bone is living tissue that is constantly being broken down and replaced. Osteoporosis occurs when the creation of new bone doesn't keep up with the loss of old bone.

Osteoporosis affects men and women of all races. But white and Asian women, especially older women who are past menopause, are at highest risk. Medicines, healthy diet and weight-bearing exercise can help prevent bone loss or strengthen already weak bones.

Symptoms

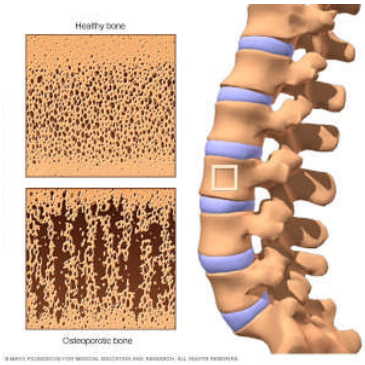
There typically are no symptoms in the early stages of bone loss. But once your bones have been weakened by osteoporosis, you might have signs and symptoms that include:

- Back pain, caused by a broken or collapsed bone in the spine.
- Loss of height over time.
- A stooped posture.
- A bone that breaks much more easily than expected.

When to see a doctor

You might want to talk to your health care provider about osteoporosis if you went through early menopause or took corticosteroids for several months at a time, or if either of your parents had hip fractures.

Causes



Osteoporosis weakens bones

Your bones are in a constant state of renewal — new bone is made, and old bone is broken down. When you're young, your body makes new bone faster than it breaks down old bone and your bone mass increases. After the early 20s this process slows, and most people reach their peak bone mass by age 30. As people age, bone mass is lost faster than it's created.

How likely you are to develop osteoporosis depends partly on how much bone mass you attained in your youth. Peak bone mass is partly inherited and varies also by ethnic group. The higher your peak bone mass, the more bone you have "in the bank" and the less likely you are to develop osteoporosis as you age.

Risk factors

A number of factors can increase the likelihood that you'll develop osteoporosis — including your age, race, lifestyle choices, and medical conditions and treatments.

Unchangeable risks

Some risk factors for osteoporosis are out of your control, including:

- **Your sex.** Women are much more likely to develop osteoporosis than are men.
- **Age.** The older you get, the greater your risk of osteoporosis.

- **Race.** You're at greatest risk of osteoporosis if you're white or of Asian descent.
- **Family history.** Having a parent or sibling with osteoporosis puts you at greater risk, especially if your mother or father fractured a hip.
- **Body frame size.** Men and women who have small body frames tend to have a higher risk because they might have less bone mass to draw from as they age.

Hormone levels

Osteoporosis is more common in people who have too much or too little of certain hormones in their bodies. Examples include:

- **Sex hormones.** Lowered sex hormone levels tend to weaken bone. The fall in estrogen levels in women at menopause is one of the strongest risk factors for developing osteoporosis. Treatments for prostate cancer that reduce testosterone levels in men and treatments for breast cancer that reduce estrogen levels in women are likely to accelerate bone loss.
- **Thyroid problems.** Too much thyroid hormone can cause bone loss. This can occur if your thyroid is overactive or if you take too much thyroid hormone medicine to treat an underactive thyroid.
- **Other glands.** Osteoporosis has also been associated with overactive parathyroid and adrenal glands.

Dietary factors

Osteoporosis is more likely to occur in people who have:

- **Low calcium intake.** A lifelong lack of calcium plays a role in the development of osteoporosis. Low calcium intake contributes to diminished bone density, early bone loss and an increased risk of fractures.
- **Eating disorders.** Severely restricting food intake and being underweight weakens bone in both men and women.
- **Gastrointestinal surgery.** Surgery to reduce the size of your stomach or to remove part of the intestine limits the amount of surface area available to absorb nutrients, including calcium. These surgeries include those to help you lose weight and for other gastrointestinal disorders.

Steroids and other medicines

Long-term use of oral or injected corticosteroid medicines, such as prednisone and cortisone, interferes with the bone-rebuilding process. Osteoporosis has also been associated with medications used to combat or prevent:

- Seizures.
- Gastric reflux.

- Cancer.
- Transplant rejection.

Medical problems

The risk of osteoporosis is higher in people who have certain medical problems, including:

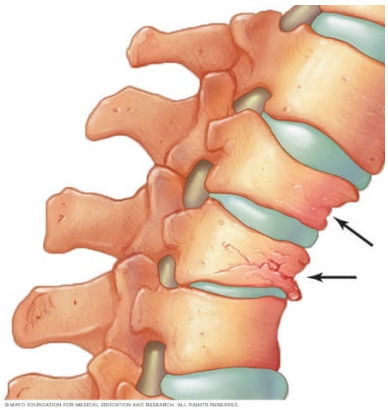
- Celiac disease.
- Inflammatory bowel disease.
- Kidney or liver disease.
- Cancer.
- Multiple myeloma.
- Rheumatoid arthritis.

Lifestyle choices

Some bad habits can increase your risk of osteoporosis. Examples include:

- **Sedentary lifestyle.** People who spend a lot of time sitting have a higher risk of osteoporosis than do those who are more active. Any weight-bearing exercise and activities that promote balance and good posture are good for your bones, but walking, running, jumping, dancing and weightlifting seem particularly helpful.
- **Excessive alcohol consumption.** Regular consumption of more than two alcoholic drinks a day increases the risk of osteoporosis.
- **Tobacco use.** The exact role tobacco plays in osteoporosis isn't clear, but it has been shown that tobacco use contributes to weak bones.

Complications



Compression fractures

Bone breaks, particularly in the spine or hip, are the most serious complications of osteoporosis. Hip fractures often are caused by a fall and can result in disability and even an increased risk of death within the first year after the injury.

In some cases, broken bones in the spine can occur even if you haven't fallen. The bones that make up your spine, called vertebrae, can weaken to the point of collapsing, which can result in back pain, lost height and a hunched-forward posture.

Prevention

Keep Your Bones Healthy
While nearly everyone will lose bone over the course of their lifetime, there are several steps you can take to keep your bones healthy.

Good nutrition and regular exercise are essential for keeping your bones healthy throughout your life.

Calcium

Men and women between the ages of 18 and 50 need 1,000 milligrams of calcium a day. This daily amount increases to 1,200 milligrams when women turn 50 and men turn 70.

Good sources of calcium include:

- Low-fat dairy products.
- Dark green leafy vegetables.
- Canned salmon or sardines with bones.
- Soy products, such as tofu.
- Calcium-fortified cereals and orange juice.

If you find it difficult to get enough calcium from your diet, consider taking calcium supplements. However, too much calcium has been linked to kidney stones. Although yet unclear, some experts suggest that too much calcium, especially in supplements, can increase the risk of heart disease.

The Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine recommends that total calcium intake, from supplements and diet combined, should be no more than 2,000 milligrams daily for people older than 50.

Vitamin D

Vitamin D improves the body's ability to absorb calcium and improves bone health in other ways. People can get some of their vitamin D from sunlight, but this might not be a good source if you live in a high latitude, if you're housebound, or if you regularly use sunscreen or avoid the sun because of the risk of skin cancer.

Dietary sources of vitamin D include cod liver oil, trout and salmon. Many types of milk and cereal have been fortified with vitamin D.

Most people need at least 600 international units (IU) of vitamin D a day. That recommendation increases to 800 IU a day after age 70.

People without other sources of vitamin D and especially with limited sun exposure might need a supplement. Most multivitamin products contain between 600 and 800 IU of vitamin D. Up to 4,000 IU of vitamin D a day is safe for most people.

Exercise

Exercise can help you build strong bones and slow bone loss. Exercise will benefit your bones no matter when you start, but you'll gain the most benefits if you start exercising regularly when you're young and continue to exercise throughout your life.

Combine strength training exercises with weight-bearing and balance exercises. Strength training helps strengthen muscles and bones in your arms and upper spine. Weight-bearing exercises — such as walking, jogging, running, stair climbing, skipping rope, skiing and impact-producing sports — affect mainly the bones in your legs, hips and lower spine. Balance exercises such as tai chi can reduce your risk of falling especially as you get older.

Natural Treatment Options for Osteoporosis

By Barbie Cervoni, RD
Published on May 19, 2023
Medically reviewed by Emily Dashiell, ND

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Traditional treatment options for osteoporosis include fall prevention, exercise, adequate nutrition, and medications. In addition to traditional options, natural remedies may be beneficial. The goal of treating osteoporosis is to prevent further bone damage.
Some bone loss is a natural part of aging, but hormonal changes, family history, and certain lifestyle factors, such as a poor-quality diet and smoking, can contribute to osteoporosis.[1]
This article investigates natural treatment options that can be utilized in the treatment and management of osteoporosis.


skynesher / Getty Images

Osteoporosis Diet

Bone building occurs during childhood; people experience peak bone mass sometime during their 20s.[2] To prevent osteoporosis, it is important to achieve peak bone mass, which requires eating a nutritious diet that contains foods rich in calcium, magnesium, selenium, vitamin K, vitamin D, and protein. To treat osteoporosis, you still need to get enough of these nutrients.[3]

What to Eat

Some experts recommend considering your total dietary pattern rather than focusing on specific nutrients in isolation. That's because getting a variety of nutrients is important for bone health.
Foods rich in **calcium** and **vitamin D** are key for building bone and maintaining bone strength. Calcium-rich foods include dairy products (cheese, yogurt, milk, and fermented milk products). Dairy products also contain other nutrients important for bone health, including protein, magnesium, phosphorous, and vitamin B12.
If you do not eat dairy, you can choose foods fortified with calcium, including yogurt alternatives, nut-based milks, orange juice, cereals, and tofu. Salmon and fish with bones, like sardines, contain calcium. Plant-based calcium sources include kale, cabbage, and other leafy green vegetables.
Vitamin D is responsible for calcium absorption. It is found naturally in only a few foods but can also be made in the body from sun exposure. People who are deficient in vitamin D may need to take a supplement.
Food sources of vitamin D include fatty fish (such as trout, salmon, tuna, and mackerel) and fish liver oils, beef liver, egg yolks, fortified milk, other fortified foods (milk alternatives, breakfast cereals, juice), and mushrooms treated with ultraviolet (UV) light.
Certain minerals, such as **magnesium** and **selenium**, can also impact bone health. Natural sources include pumpkin seeds, sweet potatoes, cashews, beans, spinach, peanuts, Brazil nuts, chicken, fish, and shrimp.

These foods are also rich in **protein**, a macronutrient that plays a role in bone volume, mass, mineralization, and formation. Other protein sources include whole grains, soy, and animal products like eggs, dairy, and beef.

Soybean foods are sources of soy isoflavones, which have estrogen-like activity and are called phytoestrogens. Some studies show this may be beneficial for bone health. Soybean foods high in isoflavones include soybeans, edamame, miso, natto, tempeh, and tofu.

Lastly, foods rich in **vitamin C** and **vitamin K** contribute to healthy bones. Foods rich in vitamin C include citrus fruits, berries, peppers, tomatoes, fortified juice, and cruciferous vegetables (in which vitamin K is also found).

Vitamin D Deficiency

Vitamin D deficiency can aggravate osteoporosis, especially in older people and people who are postmenopausal. If you are concerned with your vitamin D status, have your levels checked by a healthcare provider. Then meet with them or a registered dietitian to discuss whether supplementation is needed and in what dose.

Eating a variety of foods is important for bone health and will help you meet your nutrient requirements for each vitamin and mineral. If you are concerned that your diet is lacking, you can meet with a healthcare provider to discuss supplementation (if needed).

What to Avoid

Too much alcohol and sodium may interfere with how your body metabolizes and absorbs calcium and vitamin D, which are important for bone health.

It's uncertain the impact specific amounts of alcohol have on bone. However, experts know that alcohol can impact the way calcium and vitamin D function. Therefore, the National Institute on Aging recommends drinking in moderation, if at all.

The verdict on sodium intake and bone health is controversial. Some studies suggest too much sodium can increase calcium excretion, while other studies show that ingesting more than 2,300 milligrams (mg) of sodium daily does not increase the risk of osteoporosis. Intake below that level is suggested for people with high blood pressure.

Nevertheless, the Bone Health and Osteoporosis Foundation recommends limiting processed foods high in sodium, like snack foods.

Some studies have found a link between a high intake of soft drinks, especially cola, and an increased risk of fractures. Colas contain phosphoric acid, which may reduce calcium in the body. But this area of research is not yet conclusive.

Exercise

Weight-bearing exercise helps improve bone strength in youth and adolescence. Weight-bearing exercise in adulthood aims to build strength and muscle mass, improve coordination and balance, improve daily function, and delay loss of independence associated with osteoporosis.

Specific weight-bearing exercises and activities include squats, step-ups, lunges, jumping rope, jogging, hiking, and stair-climbing. It is recommended to start under the guidance of a healthcare provider (if you are not already used to exercising) to avoid injury or pain.

Lifestyle Changes

Smoking, being inactive, and drinking too much alcohol can increase the risk of bone loss. If you smoke, consider getting help in quitting. Reduce your alcohol consumption if you drink more than moderately. Aim to move daily; walking is a great exercise to start with. Regular checkups with your healthcare provider are also important for assessment and treatment.

Acupuncture

Acupuncture is considered a complementary and alternative therapy in treating osteoporosis. That means some people use it along with mainstream treatment options, while others use it as an alternative. Acupuncture may help treat osteoporosis by improving bone mineral density.
In a meta-analysis published in the *American Journal of Chinese Medicine,* researchers found that warm-needle acupuncture—in which burning moxa cones, a compacted form of mugwort herb, are placed on the handle of the needle after insertion—could increase the bone mineral density of specific bones such as the femur.
The type of acupuncture delivered may matter, and more long-term research is needed to determine the exact effects. But this may be a worthwhile therapy to explore with your medical team if you are interested.

Medicinal Herbs

Some research suggests that certain herbs, such as red clover, horsetail, turmeric, and red sage may have beneficial effects in treating osteoporosis. Notably, most studies examining the benefits are small and short in duration. Some are animal or test tube studies rather than human studies including people with osteoporosis. Therefore, more research is needed.
In addition, herbs are not regulated by the Food and Drug Administration (FDA). Long-term use of some of these herbs is not advised. Before beginning any new regimen, you should discuss it with your medical team.

Melatonin

Melatonin is a hormone that helps regulate circadian rhythm and is known for its role in sleep. But melatonin may also play a role in bone health.
There is an association between age-related reductions in melatonin with bone loss and osteoporosis. Melatonin may prevent bone degradation, reduce oxidative stress associated with bone loss, and promote bone formation.
Yet, most studies that have been done are in animals or in test tubes. More studies conducted in humans are needed to better understand melatonin's role in treating osteoporosis. The dosage and timing of supplementation also need to be investigated.

Tai Chi

Tai chi is a form of exercise with slow, rhythmic movements. In a 2017 meta-analysis of randomized control trials, researchers found that various forms of long-term tai chi (at least 24 weeks) were effective at reducing bone mineral density loss in certain areas of the body.

Their data included older adults, perimenopausal and postmenopausal people, people with osteoarthritis, and cancer survivors.
The authors note that the type of tai chi, which may differ in impact and use of weight-bearing exercises, as well as the duration of sessions and length of programs, are important factors to consider in examining the data. In addition, the qualifications of the instructor can impact results.
These results are promising and encouraging, however, more research examining these parameters is needed.

Summary

Natural remedies for osteoporosis are plentiful and could be a starting point or an addition to conventional treatment options for osteoporosis. The same concepts used to prevent osteoporosis may help treat it.
Eating a variety of nutrient-dense foods that contain ample amounts of calcium, vitamin D, and other vitamins and minerals is an important first step. In addition, exercise, lifestyle changes such as stopping smoking if you smoke, adding various herbs to your diet, and practicing tai chi may be beneficial. Before starting anything new, discuss it with your medical team.

The Best Herbs for Osteoporosis

The Medicinal Herbs With the Best Benefits for Treating Osteoporosis

By Jeanette Kimszal, RDN
Updated on July 17, 2024
Medically reviewed by Emily Dashiell, ND

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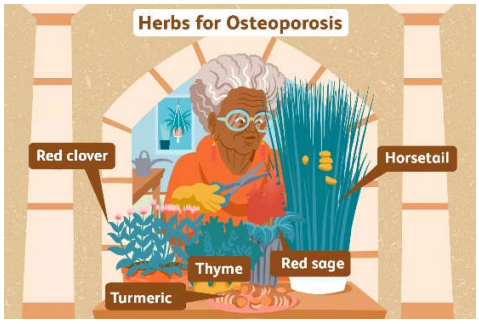
Osteoporosis is a condition that results in bones that are weak, brittle, and prone to fractures.
As we age, a decline in bone-protecting hormones can cause weak bones. As a result, postmenopausal women and older men are most likely to get this condition. Other factors that increase the risk of osteoporosis include body size, ethnicity, family history, diet, medical conditions, medications, inactivity, smoking, and excessive alcohol use.



Often there are no symptoms. That is why it is referred to as a “silent” disease. Osteoporosis is a condition not often discovered until a fracture or vertebrae collapse. The delay in diagnosis plus subsequent injuries can result in back pain, loss of height, and/or a hunched posture.
While medications can treat osteoporosis, herbs have become a popular remedy for those suffering from this condition. This article examines the research behind these natural treatments and whether they can improve bone loss and osteoporosis.

Who Is at Risk for Osteoporosis?

About 54 million people are suffering from osteoporosis and low bone mass, making them susceptible to this condition.
This condition occurs at any age, but adults 50 and older are most at risk.

Natural Herbs for Osteoporosis Treatment

There are many natural herbs recommended for osteoporosis. They may be used in cooking or are taken as a supplement in the form of a pill, powder, or tea. Here is a list of herbs that may improve bone health and work as an alternative treatment for osteoporosis:

- Red sage
- Red clover
- Horsetail
- Thyme
- Turmeric

Talk to Your Doctor About Herbs and Supplements

Always consult your doctor if you're considering taking an herb as a long-term supplement. Some herbs, including the ones listed in this article, may interfere with some medicines. If you have any health conditions and/or are on medications it is best to ask your doctor before taking a new supplement.

Red Sage

Red sage (*Salvia miltiorrhiza)* is a plant used in Chinese herbal medicine (where it is known as danshen) that has been associated with improvements in osteoporosis. A review of 36 clinical trials found red sage treated and improved more than 80% of osteoporosis cases. However, most research consisted of only small-sized, short-term studies.[3]
Salvianolic acid, tanshinones, and magnesium lithospermate B are compounds in red sage that may improve bone health. Salvianolic acids have antioxidant properties that prevent inflammation and free radical production associated with the breakdown of bone. These compounds can also help bone growth.
Red sage is also a good source of vitamin K, which is needed for healthy bones.
This herb comes in the form of a capsule or tincture, and it can be made into a tea. Red sage should be used for only a short period due to the safety concerns with long-term use. This herb may also cause side effects and drug interactions and is contraindicated during pregnancy and in use with blood thinners.[7] More research needs to be done to find the proper dosage for osteoporosis.

Red Clover

Red clover (*Trifolium pratense*) is a perennial herb belonging to the legume family. Historically, it has been used as a complementary treatment for menopausal symptoms, such as hot flashes, as well as a variety of illnesses, including cancer, respiratory problems, and skin conditions.

Research is mixed when it comes to red clover and osteoporosis. A 2015 study had 60 menopausal women take 150 milligrams of red clover for 12 weeks and the results were compared to a group that took a placebo (a substance having no therapeutic value). Researchers found that bone mineral density was improved in the women who took red clover. However, other studies showed no change in bone health.

Red clover can be consumed as an ingredient in herbal tea, as well as through capsules, tinctures, extracts, and as a topical treatment.

Horsetail

Horsetail (*Equisetum arvense*) is a huge, tree-like perennial plant found throughout parts of Europe, Asia, the Middle East, and North America. It is a medicinal herb that dates back to ancient Rome and Greece. Horsetail has been used to treat wounds, tuberculosis, and kidney issues.

Quercetin, oleanolic acid, and ursolic acid are antioxidants found in horsetail. These compounds may improve calcium levels and increase bone growth.

Horsetail also contains the compound silica. Supplements made from silica have been linked to improved bone mineral density and strength.

Although some benefits have been associated with horsetail, it still may not be the best option for you. Getting enough calcium may be more beneficial to bone health. Taking a calcium supplement for one year improved bone density better than horsetail in a study involving 122 postmenopausal women.

Horsetail comes in capsules, tinctures, and as a dried herb that can be made into a tea or mixed with liquid and applied to the skin.

Warnings for Horsetail Consumption

Long-term use of horsetail is not advised. This herb can lower thiamin (B1) levels and may cause a deficiency in this vitamin. Horsetail could be harmful to pregnant women and those with diabetes, gout, heart issues, and kidney problems.

Thyme

Thyme (*Thymus vulgaris*) is an herb in the mint (Lamiaceae) family native to the Mediterranean. This small, low-growing shrub is a popular spice to use in cooking. It also is a medicinal plant that dates back to ancient times. Thyme has been used to enhance immune function and treat respiratory, nerve, and heart conditions.

One study examined how taking 1,000 milligrams of thyme daily for six months would affect 40 postmenopausal women. Researchers found that regular consumption of thyme improved bone mineral density better than a calcium/vitamin D3 supplement.

Thyme may be most effective when used with sage and rosemary. Bone mineral density levels were higher with this combination than with thyme alone.

Vitamins in Thyme

Thyme also offers a good source of calcium, vitamin K, magnesium, manganese, and zinc. These nutrients can improve bone health.

The study evaluated thyme as a fresh and dried herb. Oil extracts of thyme are also available in liquid and capsule form and may have different effects. Talk with your healthcare provider about long-term use.

Thyme is considered safe when used in small amounts. Large doses of this herb have been associated with side effects. Thyme may be harmful to people with bleeding disorders and hormone-sensitive conditions. It can also cause allergies in those allergic to other Lamiaceae plants such as oregano, sage, and lavender.

This herb shows promise as a treatment for osteoporosis, but more research is needed to know how it can help bones long term.

Turmeric

Turmeric (*Curcuma longa*) is a yellow perennial root belonging to the ginger family (Zingiberaceae) and native to South Asia. Its anti-inflammatory and antimicrobial properties have made it important to herbal medicine for the past 4,000 years. Turmeric has been used to treat menstrual symptoms, arthritis, and digestive issues.

Curcumin, the active ingredient in turmeric, may help with low bone density. A preliminary study found taking a curcumin supplement for six months showed significant improvements in 57 people with low bone density.

Turmeric comes as a dried powder that can be used in cooking. It is also available in a tincture, liquid, or capsule form.

Side effects have been seen when using large doses or taking turmeric for more than 12 months. Turmeric may also cause allergies and complications in those with bleeding disorders, diabetes, and gallbladder issues.

Longer studies need to confirm the overall safety and effectiveness of turmeric and curcumin for treating osteoporosis. Caution should be taken when trying this herb.

Soy Isoflavones

Soy isoflavones are compounds found primarily in bean plants like soybeans. The isoflavones are considered phytoestrogens because they provide a plant-based source similar to the hormone estrogen that's produced in the body.

With the loss of estrogen at menopause, the risk of bone loss in females is increased. Studies have demonstrated that soy isoflavones in the diet may improve bone health and slow bone loss associated with osteoporosis.

Side effects of soy can include digestive symptoms, including constipation and diarrhea. It's not clear that soy isoflavone supplements are safe for long-term use, or for pregnant people or those diagnosed with breast cancer.

Research continues into the benefits of soy isoflavones, as well as any potential risks.

Summary

Herbal remedies have been seen as a natural alternative to osteoporosis medications. These plants contain bone-strengthening compounds that may improve bone growth. The research shows promise, but we need more extended large-scale studies to find the long-term effects of these herbs on osteoporosis.

There is still a lot we don't know about these herbs and their effects on osteoporosis. If you are looking for help with your osteoporosis, these plants may be a good complement to your medical treatment, depending on your health status. Be sure to talk with your doctor before adding any supplements to your care routine.

April Class Options

Monday Noon Stability Ball class (Studio)(*Zoom and In Person*)(4 Classes)
Monday 6pm Yoga (Studio)(*Zoom and In Person*) (4 Classes)
Tuesday 10am Senior Yoga (Fridley CE)(In Person ONLY) This is an ongoing, pay as you go class
Tuesday Noon Yoga (Studio) (*Zoom and In Person*) (5 Classes)
Tuesday 6pm Yoga (Fridley Columbia Heights)(*Zoom and In Person*) (5 Classes)
Wednesday Noon Chi Kung Class (Studio) (*Zoom and In Person*)(5 Classes)
Wednesday 6pm T'ai Chi Ch'uan (Fridley Columbia Heights)(*In Person ONLY*) (5 Classes)
Thursday Noon Yoga (Studio)(*Zoom and In Person*)(4 Classes)
Thursday 6pm Yoga (Spring Lake Park)(*Zoom and In Person*) (4 Classes)
Friday 10:30am Gentle Yoga (St Anthony) (*Zoom and In Person*)(7 Classes)Class runs February 28th to April 25th
Friday Noon Stability Ball class (Studio)(*Zoom and In Person*)(3 Classes)
Saturday 10am Yoga (Fridley Columbia Heights) (*Zoom and In Person*)(4 Classes)