

SUPREME

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FUNCTIONAL FOOD CONCENTRATES SUPREME SERIES

SUPA BONE *plus*

超級骨酪健



ENG

PRODUCTS YOU TRUST

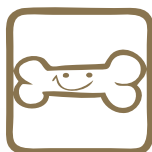
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6 benefits of SupaBone Plus

1. Exclusive proprietary formula 'OSTEOBALANCE' helps to prevent and repair osteoporosis, strengthen bone comprehensively
2. Helps to boost neuromuscular coordination and stabilize blood pressure
3. Higher absorption rate than calcium carbonate by 45%, meets the optimal intake of calcium supplement for human
4. Helps people with impaired thyroid function
5. Helps to build bones, retain calcium and protect the heart simultaneously
6. Helps to support and maintain teeth health



*This product is not registered under the Pharmacy and Poisons Ordinance or the Chinese Medicine Ordinance. Any claims made for this product have not been evaluated for the purposes of such registration. This product is not intended for the diagnosis, treatment or prevention of any diseases

What is skeleton?

The skeleton provides a structure for human body. Apart from supporting body motions, the skeleton protects organs, synthesizes red blood cells as well as white blood cells, stores minerals (e.g. Calcium, Magnesium, Phosphate) and so on.

Every day, our skeleton makes new bone tissues to replace the old ones that have been broken down. In addition, our body extracts the necessary nutrients from the bones to maintain the normal functioning of other organs. It takes 10 years for the bones to complete one renewal cycle, as the renewal rates in the body differ, and old and new bones always coexist. After middle age, the renewal rate of the bones slows down, causing our bones to tend towards thinness, which is the reason for the formation of osteoporosis. Therefore, we must ensure that the bones have sufficient nutrients to maintain their required state.



Osteoclast

When plasma calcium is low, osteoclast breaks down bones to release calcium to blood.



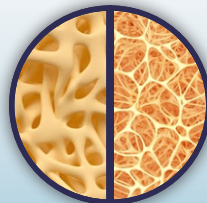
Osteoblast

When plasma calcium is high, osteoblast stores calcium in bones.

Among most of the nutrients, the skeleton contains the greatest amount of calcium, around 99% of calcium are stored in skeleton and teeth. The rest are distributed throughout the body. A small amount of calcium is sufficient to maintain the countless important ions responsible for nerve conduction and muscle contraction within the body. Therefore, the balance of minerals is crucial for maintaining overall bodily health. Even a slight imbalance may cause the skeletal to become fragile.

When the skeleton becomes weak, what happens to the body?

- Osteoporosis
- Back pain, hunchback
- Loose teeth
- Brittle nails
- Weakened muscle, immobility



normal bone tissue osteoporosis

- Muscle Cramp
- Decrease in height
- Hard to breathe
- Heart blockage
- Alter sleep quality
- Mood swing

What factors account for loss in bone tissue?

Unhealthy dietary habits

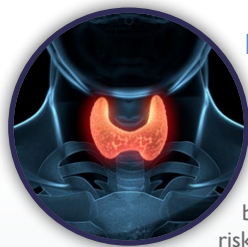
Frequent consumption of alcohol, caffeine, carbonated drinks, sweets, foods with lots of additives, and high-protein foods can result in excessive phosphorus levels in the blood. Not only does this affect the body's absorption of minerals, but it also accelerates the release of calcium from bones into the bloodstream, leading to bone loss.

Irregular exercise habit

According to statistics from the WHO, 1 out of every 4 people globally does not have an exercise habit. If the bones do not experience regular stress to stimulate their growth, the rate of bone loss will increase. People without an exercise routine are also more prone to muscle atrophy, which reduces the protection for their bones.

People who are exposed to the sun for less than 30 minutes per day

Sunlight can stimulate the body to produce vitamin D. It helps the absorption of calcium, which is one of the essential elements for maintaining strong bones. According to clinical research evidence, 51% of school-aged children and adolescents are deficient in vitamin D, and 90.3% have insufficient vitamin D levels. Those who have limited sunlight exposure, such as people with desk jobs, or women who frequently use sunscreen, are at high risk of vitamin D deficiency, which can accelerate the rate of bone loss.



People with poor thyroid health

The thyroid gland is responsible for stimulating metabolism, while the parathyroid glands, located behind the thyroid, play a role in regulating calcium and phosphorus metabolism. The parathyroid glands can stimulate the release of calcium from bones, increase intestinal absorption of calcium, and control calcium loss, in order to maintain a balance of calcium in the blood. Therefore, individuals with parathyroid disorders are also at an increased risk of bone loss.

Long-term use of medications

The hectic urban lifestyle has led many people to suffer from chronic stomach problems. However, long-term use of antacids containing aluminum can reduce stomach acid, which in turn affects the absorption of calcium and other minerals that are beneficial for bones. Additionally, corticosteroid medications can also impact the function of the parathyroid gland, accelerating the loss of calcium from the bones.



What factors account for loss in bone tissue?

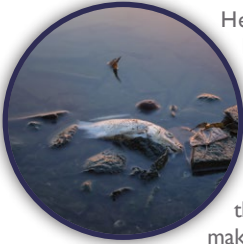
Women during menopause

As women enter menopause, the function of the ovaries gradually slows down, leading to a decrease in the production of female hormones. This causes the rate of bone loss to accelerate. According to the Osteoporosis Society of Hong Kong, the first 10 years after menopause are the peak period for bone loss in women.

Age

The shape and size of bones change with age. Bone mass grows rapidly during childhood and adolescence, reaching its peak level around the 30s. After the age of 40, the activity of osteoblast starts to decline, while the activity of osteoclast increases, leading to a decrease in bone mineral density.

Accumulation of toxins - Heavy metals



Heavy metals are one type of environmental pollutant that can enter the human body through water, food, and air, causing chronic damage. Studies have suggested that lead and cadmium are associated with low bone mineral density. Cadmium can be found in seafood, first-hand or second-hand smoke. Long-term accumulation of cadmium can affect the metabolism of calcium in the bones, leading to osteoporosis. Drinking unfiltered tap water and taking traditional Chinese medicines can also expose people to lead. Lead can inhibit the absorption of calcium, zinc, and other minerals that are beneficial for bones, making the bones more fragile.

Reference :

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Genetics

The peak bone mass of an individual is largely determined by their unique genetic makeup. For example, the vitamin D receptor (VDR) gene can influence up to 70% of bone mineral density, as it is related to how the body regulates calcium, the growth and breakdown of bone cells, and the intestinal absorption of calcium. However, not everyone undergoes genetic testing to ascertain their bone health. As a result, many miss the golden hour for supplementing their nutrition, which increases the risk of bone loss.



How to strengthen bone health?

As human cannot synthesize minerals, we must ensure our body have adequate daily intake of minerals.

Maintaining Good Dietary Habits



We need to consume sufficient minerals throughout different life stages. We must ensure that we consume some calcium-rich foods from our daily diet to meet the body's needs, such as firm tofu, almonds, black beans, sesame, broccoli, and sardines. Although the calcium content in these foods is lower than dairy products, they greatly reduce the irritation to the intestines and provide an additional calcium source for those with lactose intolerance. Consuming more non-genetically modified soybeans and poultry without hormones can also help reduce the intake of harmful estrogens from the diet, minimizing the impact on body homeostasis.

Regular and Proper Exercise and Sun Exposure

Exercise can help strengthen osteoblast, thereby promoting blood flow in the bones and stimulating bone mass and density. Particularly, weight-bearing exercises like squats and planks are effective. Moderate exercise can also simultaneously train muscle endurance, improve joint flexibility, and enhance body coordination, thereby preventing fractures from falls. It is recommended to engage in at least 20 minutes of outdoor exercise daily. This not only strengthens the muscles and bones, but also exposes our skin to sunlight, which stimulates vitamin D synthesis and further aids in calcium absorption.

Maintain Good Sleep Quality, Go to Bed and Wake Up Early

Generally, adults should aim for 7-8 hours of sleep per night. The optimal sleep time is between 9 PM and 6 AM. During deep sleep, the body releases growth hormones, which stimulate bone growth. Therefore, getting sufficient sleep can help your skeletal system function at its best.



Detoxification

Exposure to toxins is unavoidable these days. Accumulation of toxins, such as heavy metals, can cause our skeleton to easily lose essential nutrients. Therefore, regular detoxification helps accelerate the removal of toxins from the body and the intestine. A clean, toxin-free body can enable the skeleton to function at its optimal state.

Understand the Potential Risks in Your Genes

Most of the diseases are related to abnormal gene function. While we cannot change our genes, we can understand the potential risks in our bodies through genetic testing. This allows us to ascertain the diets, exercise regimen, and nutritional supplementation for ourselves, thereby reducing the risk of getting diseases.

Stem Cells

Stem cells assist bone formation. However, our stem cells deteriorate with age, making it difficult for them to aid in bone formation. Current technology can now extract stem cells from our own body fat, and through advanced techniques, these stem cells can be induced to become bone stem cells, helping to combat the aging of the skeleton.

How to strengthen bone health?

USE SUPPLEMENTS TO STRENGTHEN THE SKELETAL SYSTEM

Based on the study "Hong Kong's first total dietary study-minerals" released by the Hong Kong Food Safety Centre last year, it was found that the mineral content of most of the foods has fallen compared with the food nutrition information updated on the Food Safety Centre website in 2014. For example the calcium content in a chicken thigh meat (lean meat) has been dropped by 48%. Research in the United States also found that the vitamin and mineral content in fruits has also fallen by 25% to 50% in the past decade. Since our body cannot synthesize nutrients to maintain a healthy skeletal system, it is gradually becoming difficult to obtain all necessary nutrients from a normal diet to meet the daily needs today. Therefore, taking supplementation is essential. The latest scientific research also shows that apart from calcium, vitamins D3, K2, magnesium and zinc are all beneficial to the skeletal system as well.

How much calcium should we consume daily? What is the equivalent amount in high-calcium food?

Calcium-rich foods



Calcium content (mg)	62.5mg	144mg	164mg	72mg	320mg
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RDA of Calcium (mg)

Children and adolescents (1300mg)	11-21 boxes	5-9 slices	265-490 g	10-18 bowls	220-410 g
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People between 20 and 59 years old (1000mg)	16 boxes	7 slices	380g	14 bowls	310g
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Pregnant women (1300mg)	16-21 boxes	7-9 slices	380-490g	14-18 bowls	310-410g
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People between 60 and 84 years old (1000mg)	16-19 boxes	7-8 slices	380-450g	14-17 bowls	310-375g
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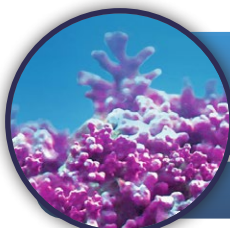
***Note:** Not a suitable source of calcium supplementation for people with lactose intolerance

From the above calculations, we can see that the number of servings we need would be massive if we would like to meet the daily calcium requirement from daily foods. Also, the raw material of soy products is one of the genetically modified crops, making it not the best option for calcium intake. Therefore, it becomes more sensible to choose a high quality functional supplement.

Source of Origin: World Health Organization, Centre for Food Safety and Hong Kong Department of Health, National Institutes of Health (NIH)

WHAT IS SUPABONE ?

SUPABONE is extracted from pure natural algae and is a brand new functional calcium supplement. The proprietary formula allows a better nutrients absorption and recognition by our body, due to the synergistic effect brought by the combined ingredients. SUPABONE is a special and better form of bone health supplement compared to others. In addition, it provides us the necessary nutrients for our bone. One tablet of SUPABONE contains 400mg of calcium, which is a suitable amount for human body absorption. Two tablets per day will provide the daily needs for most people.



SUPABONE Main Ingredients:

Aquamin® Calcium \ Aquamin® Magnesium

OSTEOBALANCE - A blend formula of:

Potassium, Zinc, Vitamin B12, Boron

Vitamin K2 (MK-7), Vitamin D3

EXCELLENT EFFICACY OF INGREDIENTS

AQUAMIN® CALCIUM

Aquamin® is an algae calcium extracted from the pure, pollution-free sea in Northern Europe, it is rich in calcium. Indeed, in the human body, about 99% of the calcium is stored in bones and teeth, and the remaining 1% of calcium is distributed in various organs and tissues in the human body. Calcium is extremely important in building the structure of bone and supporting the metabolism in our whole body, such as blood clotting, helping with neurotransmitters, coordinating muscle contraction and relaxation.



AQUAMIN® MAGNESIUM

Apart from calcium, Aquamin® is also rich in magnesium. Magnesium is one of the main elements that builds the bone structure. About 70% of magnesium in our body is stored in bones, it combines with calcium to bring a synergistic effect to strengthen the absorption of calcium, so as to maintain the health of bones, and help prevent from losing bone density. In our body, magnesium plays a vital role in physiological functions, it is involved in different mechanisms such as synthesis of DNA and proteins. Also, magnesium helps to maintain the health of heart, muscles and nervous system. Magnesium is one of the essential macro-minerals, which helps to inhibit calcium deposits in organs and arteries. Supabone plus contains magnesium glycinate, it is considered more bioavailable and having higher bioaccessibility, meaning a higher percentage of the consumed magnesium can be absorbed and utilized. Magnesium glycinate is effective for treating low magnesium levels, well-tolerated, and less likely to cause gastrointestinal side effects than other forms, such as magnesium oxide and magnesium sulfate.

OSTEOBALANCE - A BLEND FORMULA OF

Potassium , Zinc, Vitamin B12, Boron, Vitamin K2 (MK-7), Vitamin D3 :



1. POTASSIUM

Potassium is one of the seven essential macro-minerals that every cell needs it to deal with their functions. The primary functions of potassium in the body include regulating fluid balance, controlling the electrical activity of the heart and muscle contractions, and nerve impulses. Therefore, without enough potassium, the nerves and muscles including heart may not work properly. Adequate potassium intake also helps maintain bone mineral density and reduce the risk of losing bone mass.

2. ZINC

Zinc is one of the essential minerals that maintains human metabolism. 90% of zinc is stored in muscle and bone. The major functions of zinc include muscle contraction and relaxation, as well as maintaining the strength of immune system. Many studies found that taking calcium, magnesium, zinc and vitamin D together can help maintain a better bone health.

3. VITAMIN B12

Homocysteine is an amino acid with sulfur produced by protein metabolism in the body. Vitamin B12 deficiency causes an elevation in homocysteine level, while a higher homocysteine level is associated with an increased risk of osteoporosis and fractures.

Some in vitro studies showed high circulating homocysteine level causes impairment to collagen cross linking, (2 , 3) as well as interference to osteoclast (4) and osteoblast (5) activity, and thus leads to poor bone health and fragility fractures.

Furthermore, vitamin B12 deficiency is found to be increasing risks of osteoporosis and fractures in menopausal women. Adequate B12 helps maintain bone mineral density and reduce the risk of bone loss during menopause and postmenopause.

For a better absorption and utilization, vitamin B12 needs to be digested by the stomach, and methylated with the aids of MTHFR and MTRR genes. The methylated vitamin B12 in Supabone Plus can eliminate the conversion steps (methylation), this helps people with genetic defects in converting vitamin B12.

4. BORON

Boron is an essential micro mineral, naturally found in many vegetables and fruits and rarely found in animals, including almonds, peanuts, hazelnuts, dates, dried plums, raisins, soybeans, wine and honey. Boron is vital to bone health and growth and latest research discovered that boron can enhance the absorption and metabolism of calcium, magnesium and potassium. Thus, it can maintain the bone density and boost up the recovery of bone fracture.



5. VITAMIN D3

Vitamin D, also called Sunshine Vitamin, it is because the UVB radiation in sunlight stimulates our skin to synthesize vitamin D. The ability to synthesize vitamin D declines with the age. Elderly and sun-deprived group have a higher chance to get vitamin D deficiency. Vitamin D is essential for our body metabolism; it does not only help in calcium absorption and adjust the calcium concentration in blood, but it also increases the absorption of minerals into the bone, thereby strengthening the bone development and growth. Also, Vitamin D helps maintain neural, muscular system health, muscle strength, and reduce the chance of getting bone fracture after a fall.

6. VITAMIN K2 (MK-7)



Vitamin K2 plays a key role in production of both coagulation and anticoagulation, and it is an indispensable nutrient for blood clotting, even excessive intake of vitamin K2 does not easily lead to blood clot. Vitamin K2 (MK-7) extracted from natto, its main function is to prevent calcium from being deposited in arteries. If calcium is deposited in arteries, the risk of heart disease will increase. By providing the body with vitamin K2 (MK-7), it helps remove calcium from the blood and transfer calcium to the right place in the bone and teeth.

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The Benefits of SupaBone plus

1. Contains Multi-Minerals That Help In Strengthening The Bones

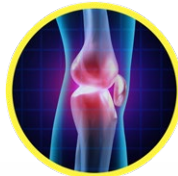
Rich in calcium, magnesium and the unique OSTEObALANCE blend. Aquamin® is a natural calcium extracted from algae. Compare to similar plant-derived calcium sources, Aquamin® has the highest calcium absorption rate due to its high biological activity. Also, magnesium glycinate, is more bioavailable and bioaccessibility compare with other form of Magnesium glycinate. It also with a higher absorption rate. With the OSTEObALANCE blend, vitamin K2 (MK-7), it helps remove calcium from the blood and transfer calcium to the right place in the bone and teeth.

Vitamin D helps the absorption of calcium, and boron can promote the absorption and metabolism of calcium, magnesium, and potassium, and can maintain bone density. In addition, vitamin B12 prevent osteoporosis and fragility fractures. Therefore, calcium, magnesium and OSTEObALANCE blend, help calcium absorption and utilization, strengthens bones in all aspects, prevent and repair osteoporosis.



2. Strengthens muscle coordination and neurons system and may assist in stabilizing blood pressure

Aquamin® has been clinically proven to helps increase in joint flexibility, reduce joint discomfort, and maintain healthy bone tissue. In addition, the formula contains magnesium, potassium, calcium, helps muscle contraction and relaxation, and helps increase muscle coordination and reduces cramps. Calcium regulates cell activity and is a signal molecule for cells. Changes in the calcium concentration in the blood may affect the function of many cells, including the contractile function of vascular smooth muscle cells that play an important role in the formation of vascular resistance. Due to calcium deficiency, the calcium balance in and out of the cell may change, causing an increase in a systemic resistance vasoconstriction of the smooth muscle cells. In addition, potassium can also maintain the normal function of myocardium and have a certain effect on the protection of blood vessels.



3. The Best Calcium Amount For Body Absorption Per Serving, 45 % Higher Than That Of Calcium Carbonate

Aquamin® is a plant source of calcium that is rare in the market for its high bio-absorption rate and utilization rate. Its structure is more active than normal synthetic calcium, and it has a pure natural microelement structure. Some researches reveal that pure natural Aquamin® has a 45% higher calcium absorption rate than traditional calcium supplement (usually calcium carbonate). The calcium absorption rate of human body will begin to drop when the dosage is more than 500 mg. Therefore, each capsule containing 400 mg of calcium is suitable for human body absorption per serving. As the recommended daily calcium intake for adults is about 1,000 milligrams, and our diet normally includes certain amount of calcium, two capsules daily is adequate to meet the needs for most people. Natural Seaweed calcium does not cause bloating and constipation and does not burden the body, allowing to meet daily calcium needs more effectively and safely. It also let the remaining calcium in the blood vessels can be cleared to prevent calcification and hardening of blood vessels.

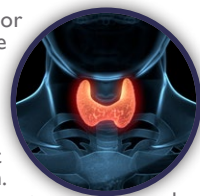


The Benefits of SupaBone plus

4. Suitable For People Who Concern Thyroid Health

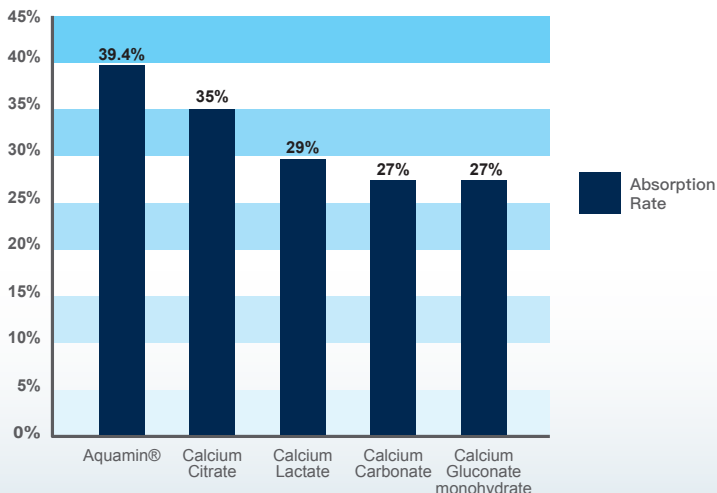
People with parathyroid damage or impaired function may cause temporary or permanent hypocalcemia. The parathyroid gland is behind the thyroid gland in the neck. The parathyroid gland secretes mainly parathyroid hormone (PTH). The role of parathyroid hormone is to administer important hormones for calcium and phosphorus metabolism. It can promote bone absorption, maintain blood calcium concentration, increase the absorption of calcium in the intestine and reduce the loss of calcium from the body. In short, PTH can keep the body's blood calcium at a certain level and maintain the body's normal calcium and phosphorus metabolism.

If PTH secretion is reduced, the blood calcium concentration cannot be maintained, which can lead to a series of symptoms caused by low calcium, such as cramps, paralysis of hands and feet. From here we see that to tackle hypocalcemia, we must first maintain the balance of PTH, and the calcium, vitamin D and vitamin K2(MK-7) contained in the SUPABONE helps provide the nutrients needed for PTH and thus improve bone health.



5. Osteobalance Formula Aids In Bone And Heart Health Without Arterial Calcification

Osteobalance formula is specifically added with Vitamin K2 (MK-7) and D3 that can help calcium absorption. Studies show that calcium can be more easily absorbed with vitamin K2 (MK-7), D3 and other trace elements. By adding vitamin D3, it can effectively bring calcium into the blood. With the vitamin K2 (MK-7), calcium can be transported through the blood to the bones. At the same time, the remaining calcium in the blood vessels can be cleared to prevent calcification and hardening of blood vessels.



6. Supports And Maintains Healthy Teeth Growth

The teeth are mainly formed by calcium and are the hardest tissues in the human body. Lack of calcium in body can be reflected on the teeth, and it is easy to form loose bone. At this time, since the alveolar bone is fragile and atrophic, it will also increase the risk of periodontal disease, and even cause the teeth to loose and fall off.

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