# Osteochron®

Osteochron® is a highly active vitamin and mineral complex that supports overall bone health. The high bioavailability of the minerals and vitamins in Osteochron®, in combination with the chronobiologically balanced composition of the formula into morning and evening doses, ensures optimal and high-grade supply of all the important nutrients your bones need.

# **Basic Facts**

Adequate levels of calcium are important, especially in the elderly – this is true for women as well as men. In addition to aiding in the healthy functioning of muscles and blood coagulation, this mineral is an essential component of bone.

With advanced age, the natural balance between bone formation and bone degradation may become disturbed, eventually leading to degeneration of bone, a reduction in bone density and increased fragility. Daily supplementation of calcium in adequate amounts is important for the elderly and should be an integral part of proper health maintenance.

Supplementing with microcrystalline hydroxyapatite calcium (MCHC®) is a particularly effective way of providing the body's daily requirement of calcium and other minerals. MCHC® is a food supplement that fulfills the daily calcium requirement of the body in an effective and safe way.

In addition to calcium and MCHC®, Osteochron® provides many of the other important vitamins, minerals and nutrients required for healthy bone metabolism in the correct chronobiological form to support overall bone health. As part of a health-conscious diet, Osteochron® is an ideal way to maintain bone health and provide your skeletal system with the nutrients it needs to maintain optimum bone strength and density.

# **Effects**

Osteochron® provides important vitamins, minerals and nutrients required for healthy bone metabolism in the correct chronobiological form to support overall bone health. Each dose of Osteochron® contains:

The MCHC® (microcrystalline hydroxyapatite calcium) contained in Osteochron® is an especially unique substance. Hydroxyapatite forms the basis of the bony substance of all vertebrates, including humans. It constitutes about 40 percent of bone and as much as

95 percent of dental enamel. In addition to calcium and phosphate, which are essential components, it is composed of all minerals contained in healthy bone in the same balanced ratio. MCHC®'s special microcrystalline form of administration allows optimal absorption by the body. In addition to calcium, MCHC® contains mineral phosphates, magnesium, fluorides, zinc, copper, manganese, silicon and other trace elements.

Calcium is one of the main components of bone tissue and is perhaps the most well-known mineral when it comes to healthy bones. Maintaining adequate levels of calcium is especially important in the elderly, who experience higher instances of bone degeneration, reduction of bone density and increased bone fragility. Not only are low calcium levels associated with low bone density and a higher risk of bone fracture, but it has also been shown that most people do not get adequate calcium from their diet to maintain healthy bones. For this reason, daily calcium supplementation is important for both men and women, especially with advanced age.

Vitamin C (ascorbic acid) is a water-based vitamin that is crucial to many biological processes including the healthy growth and repair of tissues, the generation of connective tissues like collagen, iron absorption, protecting immune system health and maintaining healthy bones. Vitamin C's antioxidant properties also make it a valuable freeradical fighter that can help protect against oxidative damage.

Vitamin D3 (as cholecalciferol) contributes to bone health by promoting the absorption of calcium and phosphorus in the digestive tract, both of which are crucial to maintaining healthy bones. A vitamin D deficiency prompts the body to rob needed calcium from the bones, increasing the chances of osteoporosis and osteomalacia (bone softening), especially in the elderly. Recent studies verify the role of vitamin D in helping to maintain strong bones and have also linked low levels of vitamin D

to a surprising variety of other health concerns, making it an important addition to your daily supplement regimen.

Vitamin K2 (menaquinone-7) is a fat-soluble vitamin that is stored in your body and is best known for contributing to healthy blood coagulation, or clotting. A less-known fact is that your body also needs vitamin K to build strong, healthy bones. Modern studies have indicated a positive correlation between vitamin K levels and bone density and have also suggested a link between vitamin K levels and risk of bone fracture in postmenopausal women.



Not only does vitamin B6 support healthy homocysteine levels and overall cardiovascular health, it also plays an important role in bone building and rejuvenation. Research has also confirmed that low levels of vitamin B6 are frequently associated with poor bone health.

Vitamin B12 is best known for its role in energy production and maintaining a healthy nervous system, but less well-known is the important role it plays in bone health. Although vitamin B12 is water-soluble, it's not excreted as readily by the body as other water-soluble vitamins, making it difficult to detect a deficiency. B12 is necessary for healthy production of osteoblasts, the cells responsible for healthy bone formation, and a deficiency is related to increased bone loss and risk of bone fractures. Vitamin B12 may also contribute to bone strength via its ability to affect the body's metabolism of homocysteine, an amino acid that can, in high levels, cause bone health to deteriorate.

Magnesium promotes healthy, strong bones in a variety of ways. Magnesium is necessary for the proper absorption and metabolism of calcium; in fact, these two minerals are dependent upon each other to function properly. Magnesium is also involved in promoting healthy bone maintenance through its support of the thyroid's production of calcitonin, a bone-preserving hormone. Additionally, magnesium is necessary for the proper regulation of parathyroid hormone, which is responsible for the breakdown of bone, among other things.

MSM, or methylsulfonylmethane, is an organic sulfur compound that supports healthy cellular inflammatory processes and healthy antioxidant levels in the body (especially glutathione) while also working to soothe minor joint discomfort.

Isoflavones (from soy) are compounds found in soybean extract that encourage the healthy formation of bone by supporting a healthy balance between osteoclasts (cells that break down bone) and osteoblasts (cells that rebuild bone) in the body. Soy isoflavones may also support healthy bone mineral density. The three most important isoflavones contained in soy are genistein, daidzein and glycitein.

Coral Calcium®: This substance regulates the pH value of the body; the more balanced the body's pH, the better its ability to absorb the active ingredients in Osteochron®.

Bioperine®: This extract, derived from black pepper, boosts the bioavailability of the active ingredients in Osteochron®.

### Uses

Helping to maintain healthy bone mass and density: A number of strategies, such as hormone replacement therapy, are available for the bone concerns that arise as we age, all of which may be used with varying degrees of success. It should be noted that there is no single suitable treatment for all people with concerns about bone health; rather, a combination of various therapies is often required.

These common symptom-based therapies are not necessarily sufficient for successful management of optimum bone health. In addition to adequate exercise, one of the most important factors in maintaining bone health, strength and density is a balanced diet rich in calcium and the specific minerals required for bone formation. It is also particularly important that the body be able to absorb adequate amounts of the calcium ingested in the diet. All these requirements are met by the daily supplementation of microcrystalline hydroxyapatite calcium (MCHC®).

When taken daily, Osteochron® contributes to optimum bone formation and repair. Furthermore, Osteochron® can be optimally integrated into existing therapies with no unwanted repercussions.

The division of this highly effective formula into a morning and an evening capsule, based on chronobiological principles, ensures an optimal supply of nutrients and vitamins are delivered to the bones throughout the day.

# Composition

# AM capsule (morning)

	per capsule	aaiiy aose
MCHC®	208 mg	416 mg
Calcium (Ca)	155 mg	310 mg
Vitamin C	28 mg	56 mg
Vitamin D3	5 mcg	10 mcg
(as cholecalciferol)		
Vitamin B6	1 mg	2 mg
Vitamin K2	40 mcg	80 mcg
(menaquinone-7)		
Coral Calcium®	12.5 mg	25 mg
Bioperine®	1.25 mg	2.5 mg
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in pharmaceutical grade. Other ingredients: microcrystalline cellulose, stearic acid, magnesium stearate, SiO<sub>2</sub>.

# PM capsule (evening)

	per capsule	daily dose
MCHC®	105 mg	210 mg
Calcium (Ca)	25 mg	50 mg
Magnesium (Mg)	125 mg	250 mg
MSM	150 mg	300 mg
Isoflavones (from so	y) 80 mg	160 mg
Vitamin B12	25 mcg	50 mcg
Coral Calcium®	12.5 mg	25 mg
Bioperine®	1.25 mg	2.5 mg

in pharmaceutical grade. Other ingredients: microcrystalline cellulose, stearic acid, magnesium stearate, SiO<sub>2</sub>.

# Dosage

In normal cases take 2 capsules AM (yellow) in the morning and 2 capsules PM (blue) in the evening with plenty of fluid.

## Instructions

Food supplements are no substitute for a well-balanced diet and a healthy lifestyle. The indicated recommended daily intake should not be exceeded. Persons under constant medical care should consult a physician before taking the supplements. Product information is not to be considered a statement regarding cure; in general, we advise against self-medication without proper consultation of a doctor. Subject to mistakes and print or typographical errors.

Store in a cool and dry environment, out of reach for children.

# Osteochron® Product Groups

Osteochron® can be found in the following product groups (www.vitabasix.com):

Bones & Joints



Chronobiology

Pain & Inflammation

Manufacturer:



www.vitabasix.com | uk@vitabasix.com Tel.: 00800-7030-7060 | Fax: 00800-1570 1590

## Important information:

Our products are manufactured in accordance with the GMP (Good Manufacturing Practice) standard. Their quality, purity and concentration are regularly tested in independent test laboratories, in keeping with the FDA (Food and Drug Administration) guidelines.

Our products should be regarded as preventive measures or measures to enhance the individual's general wellbeing. Patients must consult a doctor before using the products for the treatment of diseases.