# **PRODUCT INFORMATION**

# Glucochondrin®

Glucochondrin<sup>®</sup>'s powerful combination of glucosamine and chondroitin supports healthy joints and cartilage and provides benefits for age-related joint symptoms.

# **Basic Facts**

With age, the cartilage of the joints can begin to deteriorate; a process that is accelerated by obesity and lack of exercise. This deterioration can begin as early as age 30, however by age 60, nearly every human being will experience worn cartilage in most joints, particularly in the knee and hip. In persons who suffer from this condition, the normal balance between the formation and degradation of cartilage is disturbed.

This results in a progressive wearing of the cartilage, which may be accompanied by severe pain. The more damaged the areas of deterioration are, the greater the pain and deformation of the joints, often leading to complete loss of function. This pattern of joint cartilage degradation has been considered incurable so far. In most cases, the symptoms can only be relieved by inserting an artificial joint.

Although this concern is more prevalent with age, it does not have to be a fateful condition that can only be treated with pain-killers and operations. The underlying cause is frequently a lack of glucosamine and chondroitin within the body. Supplementing with these two important nutrients can effectively protect against the degradation of cartilage in the joints. Recent investigations show that supplying the body with the materials it needs effectively protects against loss of cartilage mass.

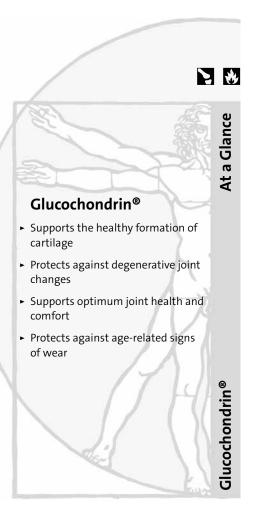
# Effects

With increasing age, the body loses its ability to produce sufficient amounts of glucosamine and chondroitin. Weight-bearing joints like the knees and hips, and also the wrists and shoulders, are most commonly affected. This deficiency can lead to the destruction of cartilage mass, indurations and the deposition of large bone spurs at the joint margins. The results are pain, deformation and a limited radius of movement.

**Glucosamine sulfate:** Glucosamine is just one constituent of glycosaminoglycans (amino sugar complexes), which are the main components of joint cartilage. Glucosamine is made up of glucose and the amino acid glutamine. The more glucosamine the body has, the more glycosaminoglycans (and therefore cartilage mass) are produced. Furthermore, glucosamine makes the joint cartilage more elastic and resistant.

Unfortunately, sufficient amounts of glucosamine cannot be obtained from food, as it is only present in the exoskeletons of shellfish. Therefore, it must be taken as a supplement. Glucosamine is available in several forms. The sulfate form (stabilized with a mineral salt) is the preferred form of administration, as it is most extensively researched. Potassium chloride is most often used for stabilization because the modern diet is usually deficient in potassium. **Chondroitin sulfate:** Chondroitin, also an important constituent of cartilage, consists of repetitive molecule chains (mucopolysaccharides). Chondroitin gives joint cartilage its structure and is responsible for its waterbinding capacity and the permeability of nutrients. The latter is especially important, as cartilage does not contain any blood vessels and is nourished by diffusion alone.

Chondroitin plays a role in the restoration of joint function, helping to protect against the deterioration of joint cartilage and even supporting fracture healing, as many trials have shown.



Chondroitin must also be obtained via supplementation, as the only source of sufficient chondroitin is animal cartilage. Similarly to glucosamine, the pharmaceutical form of chondroitin is also a sulfate.

## Uses

Cortisone drugs and painkillers, the medications currently used for the treatment of joint cartilage deterioration, usually bring about short-term relief. However, these drugs do not prevent the destruction of joints in the long-term because they only address the symptoms (pain, inflammation), while the cause of the disease (degradation of cartilage) remains untreated. These medications can also produce grave side effects which may be damaging to health in the long-term. However, the studies conducted so far concerning glucosamine and chondroitin show that the treatment of joint cartilage degradation involves more than the symptomatic management of pain and inflammation.

On its own, the combination of glucosamine and chondroitin has no analgesic or antiinflammatory effects. Therefore, leading medical experts and scientists recommend taking a combination of anti-inflammatory and analgesic agents along with glucosamine/chondroitin (Glucochondrin®) for a short while.

However, in the long-term, glucosamine/ chondroitin should be taken alone because it promotes the healthy production of cartilage. Glucosamine and chondroitin, as provided by Glucochondrin<sup>®</sup>, can serve as safe and effective natural alternatives or complementary treatment to conventional medications for joint cartilage degradation.

Glucosamine and chondroitin promote the production of the substances required for healthy joint function in the body. Both are responsible for the renewal of cartilage mass in the joints. The administration of glucosamine and chondroitin can soothe minor discomfort and help to maintain healthy freedom of movement. The most significant outcome observed in patients treated with glucosamine/chondroitin (Glucochondrin®) was the nearly complete regeneration of damaged cartilage mass; the cartilage returned to its previous healthy state. When the body is given the nutrients it needs to promote healthy cartilage cells, these remarkable results can only be achieved if the treatment is continued for a long period.

## Composition

#### One capsule contains:

Chondroitin sulfate	400 mg
Glucosamine sulfate	500 mg

in pharmaceutical grade. Other ingredients: magnesium stearate,  $SiO_2$ .

## Dosage

In normal cases, depending on body weight, take at mealtimes distributed through the day with plenty of fluid as follows:

below 60 kg body weight:	2 capsules
60–100 kg body weight:	3 capsules
over 100 kg body weight:	4 capsules

### 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.

#### **Glucochondrin®** Product Groups

Glucochondrin<sup>®</sup> can be found in the following product groups (www.vitabasix.com):



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.

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