

# GLUCOSAMINE



## ■ ■ ■ Description

Glucosamine sulfate is a small molecule used by the body as a building block for cartilage, the material covering bones on the surface of joints. It has been found to be effective in the treatment of osteoarthritis, a condition involving the destruction of cartilage, which eventually results in pain and loss of joint motion. Glucosamine is sometimes combined with chondroitin sulfate, a molecule that lubricates joint surfaces and prevents the breakdown of cartilage. However, chondroitin sulfate is poorly absorbed when taken by mouth and may not have much effect. In several short-term studies, glucosamine has been found to be as effective as ibuprofen in reducing the pain of osteoarthritis.

## ■ ■ ■ Why Athletes Use It

Athletes use glucosamine to prevent breakdown of cartilage, ligaments, and tendons.

## ■ ■ ■ Adverse Effects

Glucosamine appears very well tolerated by the body, with infrequent reports of side effects, which include:

- Nausea
- Abdominal pain

- Tachycardia (rapid heart rate)
- Edema (swelling of the feet)
- Headache
- Skin rash
- Drowsiness

## ■ ■ ■ Pharmacology

Glucosamine is usually recommended as a 500-mg pill taken three times a day. No known drug interactions exist. If no benefits are noted within 6 to 12 weeks, the drug is unlikely to be of benefit and is usually stopped. A 3-week supply of glucosamine costs about \$25. It is well absorbed when taken by mouth.

## ■ ■ ■ Preventive Measures

Glucosamine is not recommended by the Arthritis Foundation. No long-term studies have been performed, and almost all studies involved small numbers of patients. Good studies looking at safety and optimal dosage also have not been performed. Glucosamine has not been shown to protect joints from wear and tear, as sometimes advocated. It has also not been shown to have an effect on tendons or ligaments. It has not been shown to reverse arthritis.

Notes:

(Up to 4400 characters only)

Notes and suggestions