



Good news regarding glucosamine

THOSE perfect retirement years you planned may not happen because you forgot to plan for the health of your joints. Osteoarthritis (OA) affects about 20 percent of adults over the age of 45 years. And if you are a woman or overweight, your chances of developing OA are even greater.

Osteoarthritis is one of the most common types of arthritis, affecting the hands and weight-bearing joints such as knees, hips, feet and the back. This disease is characterized by the gradual breakdown of the cushioning cartilage that prevents bones from rubbing against each other. Over time, the wear and tear on rubbing bones causes irreparable damage and chronic pain.

There are thousands of products claiming to remove the pain of OA, most based on little or no scientific research. It is clear that a diet rich in vitamins C and E and carotenoids is important in maintaining healthy joints. In addition, last week a well-designed study on glucosamine was published in *The Lancet*. The three-year double-blind study, conducted by a team of researchers from Belgium, Italy and the United Kingdom, found that taking 1,500 mg glucosamine

sulfate per day can slow or prevent joint damage in many people. The glucosamine group maintained better joint function and experienced less pain than the placebo group, confirming the results of shorter term studies on glucosamine sulfate and glucosamine hydrochloride.

BEFORE you stock up on glucosamine, there are a few things you need to know:

1) Glucosamine supplements frequently include chondroitin sulfate. The *Lancet* study looked at glucosamine alone. This is particularly good news since products containing chondroitin are more expensive and ConsumerLab.com documented that more than 30 percent of the chondroitin products failed to contain the amounts listed on the product label.

2) Glucosamine is an amino sugar extracted from the shells of crabs, lobsters or shrimps. Although glucosamine should not contain protein from shells, dietary supplements are unregulated and the quality and content may vary widely. Therefore, those allergic to shellfish should consult their physician before taking glucosamine.

3) ConsumerLab.com issued a consumer alert Monday that some

glucosamine products contain manganese in concentrations that exceed the Institute of Medicine's recently published Tolerable Upper Intake Level (UL). This is the highest level of daily intake that is unlikely to pose adverse health risks. However, individuals with liver disease may experience problems at intake levels below the UL. Nuts, legumes, tea and whole grains are rich sources of manganese. It is important to consider the amount of manganese consumed from supplements and diet combined. Excessive manganese can cause impaired iron absorption and neurological symptoms similar to Parkinson's disease.

4) Read labels carefully to make sure products contain only the ingredients you want.

5) The minor glucose content of a typical glucosamine dose should not be a problem for diabetics. If in doubt, consult your physician. Do not change your prescribed medications without your doctor's advice.

6) As with many dietary supplements and herbs, children, pregnant women, and women who could become pregnant should not take glucosamine until its safety is confirmed for these groups.

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