Article: Is Glucosamine Really Effective?

Glucosamine is a natural compound found in our body that helps make the joint cartilage strong and firm. As it is not found in our food, many people take glucosamine supplements regularly to protect cartilage, as well as to manage osteoarthritis pain. Because glucosamine is made from the endoskeletons of shellfish, persons with allergies may be advised to use it cautiously and watch for a reaction, or to avoid it.

It is important to read the product labels of glucosamine supplements carefully as there are several forms of glucosamine sold in the market. These products may contain glucosamine sulfate, glucosamine hydrochloride, or N-acetyl-glucosamine. These different chemicals may not produce the same effects when taken as a dietary supplement. While some studies had proven that glucosamine hydrochloride was ineffective,[4] most of the scientific research has been done on glucosamine sulfate for the treatment of osteoarthritis. Meanwhile, insufficient data suggests that N-acetyl glucosamine might help protect the lining of the stomach and intestines.

The standard dosage of glucosamine sulphate is 1500mg once daily or 500mg 3 times daily. In Europe, glucosamine is a prescription drug with a standardized formula. In the United States and some parts of Asia including Singapore, glucosamine is sold over the counter as a dietary supplement. Since they are considered dietary supplements rather than medications, their effectiveness and side effects are not monitored by governmental agencies such as the Food and Drug Administration in the US or Health Science Authority in Singapore.

Based on human research, there is good evidence to support the use of glucosamine sulfate in the treatment of mild-to-moderate knee osteoarthritis[1]. Most studies have used glucosamine sulfate supplied by one European manufacturer (Rotta Pharmaceuticals) using 1500mg once daily dosing[2], and it is not known if glucosamine preparations made by other manufacturers are equally effective. Although some studies of glucosamine have not found benefits, these have either included patients with severe osteoarthritis or used products other than glucosamine sulfate[3]. More well-designed clinical trials are needed to confirm safety and effectiveness, and to test different formulations of glucosamine.

A recent news report highlighted a Swiss study posted in the British Medical Journal in 2010 that reviewed 10 previously published trials covering 3,803 arthritis patients. The researchers concluded that glucosamine offers “no clinically relevant effect” in terms of either pain relief or improving joint structure.[5] However, glucosamine has never been noted in any study to have the dangerous side effects associated with painkillers.[1]

Some experts consider glucosamine supplements harmless. If you're already being treated for arthritis, though, talk to your doctor or pharmacist before you take glucosamine or any other dietary supplement.

Dr Andrew Dutton, an orthopaedic surgeon with National University Hospital, says he will continue prescribing both supplements to arthritis patients but in a limited manner. “I would counsel the patient to stop taking glucosamine if there’s no benefit after three months so that the patient also does not spend needlessly,” he says.

Other health professionals such as Dr Afsoon Ghazvinian, a pharmacist based at Watson’s Raffles City acknowledges that there are conflicting studies on glucosamine, but they still have a place in practice as far as joint health supplements concern.

What do consumers of think? Madam Vembu (nickname) has been taking glucosamine for 3 months and felt her joint pain had improved “There may be no conclusive evidence in their studies as to the effectiveness of these supplements, but my knees say they work great. This is one supplement I don't mind taking it for the rest of my life.”, she says. On the other hand, Mr John (also nickname) who has been taking 1500mg of glucosamine sulfate supplements daily for almost a year now, states that “The knee pain and swelling is still there, nothing has changed except my wallet size.”

As at present, there is still no sufficiently conclusive studies on the to prove the effectiveness or ineffectiveness of glucosamine sulfate supplements, the decision to use – or not use – could well rest on the individual results consumers get.

References:

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and should not be used as a substitute for personal care by a doctor or pharmacist.

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