# Treating Osteoarthritis of the Knee: Popular supplements don't work



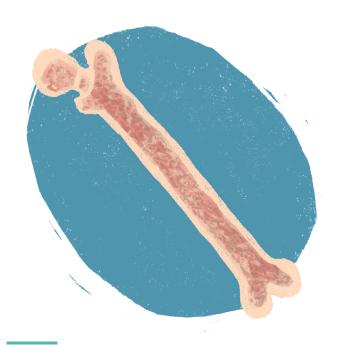
Osteoarthritis is the most common type of arthritis, affecting 1 in 10 Canadian adults (www.arthritis.ca).

The knee is one of the most common and most symptomatically affected joints, causing knee pain in many people. They often try over-the-counter remedies to help the pain, and to avoid knee surgery. Amongst these treatments are the supplements glucosamine and chondroitin sulfate, which are very popular.

Because glucosamine and chondroitin are building blocks of cartilage, and because osteoarthritis is related to cartilage degradation, many believe that adding these building blocks to the diet of a person suffering from osteoarthritis will help rebuild cartilage and lessen pain. While on the surface this may seem logical, in reality these supplements do not provide effective pain relief. Here's why:

### These popular supplements don't work.

Many studies have shown that glucosamine and chondroitin sulfate do not help to relieve pain from arthritic knees. People who take the supplements often report less pain or swelling of their joints. But people get similar results if they take a placebo—a "sugar pill" with no active ingredients. Pain relieving drugs, such as acetaminophen (Tylenol® and generic) and ibuprofen (Advil®, Motrin IB® and generic), help a lot more.



### The supplements can be dangerous.

Glucosamine and chondroitin are not harmful by themselves, but they can interact with other medicines. For example, the supplements can increase the effect of warfarin (Coumadin and generics) on blood clotting. This increases the risk of bruising and serious bleeding. Problems with warfarin frequently lead to emergency room visits.

### You aren't always getting what you think...

To make matters worse, often the labels on the bottles are misleading. In 2013, Consumer Reports tested 16 joint pain supplements and found that seven had less chondroitin than the label listed.

### Other approaches often work better.

There are more effective ways to relieve arthritic knee pain:

- Physical therapy
- Losing weight
- Acetaminophen (Tylenol® and generic)
- Ibuprofen (Advil<sup>®</sup>, Motrin IB<sup>®</sup> and generic)
- Naproxen sodium (Aleve<sup>®</sup> and generic)
- Other anti-inflammatory medications

If these don't help, you can talk to your doctor about treatments such as injections or surgery.

#### **About Choosing Wisely Canada**

Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

#### How this pamphlet was created:

This pamphlet was adapted with permission from a similar pamphlet used in the US Choosing Wisely campaign, organized by the ABIM Foundation. Modifications were made to ensure relevance for a Canadian audience. The Canadian reviewers of this pamphlet included the Canadian Orthopaedic Association.

This pamphlet is for you to use when talking with your health care provider. It is not a substitute for medical advice and treatment. Use of this pamphlet is at your own risk.

## Steps to help ease the pain of osteoarthritis of the knee

**Lose excess weight.** Losing a pound of excess weight can take about four pounds of pressure off your knees when walking.

**Physical activity.** To build support of the knees, do strength training, especially of the quad muscles on the front of the thigh. Aerobic exercise builds strength and can reduce pain. Stretching can help prevent stiffness. Ask a local YMCA or gym about exercise programs for people with arthritis.

**Mechanical aids.** A cane, crutch, or walker can take a load off painful knees.

**Heat and cold.** A heating pad can ease ongoing stiffness and soreness in joints. For acute pain and swelling, switch to ice packs.

**Massage.** Deep-tissue massage got high marks in a 2010 survey of Consumer Reports online readers. Half of them said that it "helped a lot" with their osteoarthritis.

#### Use drugs carefully.

- Ibuprofen (Advil®, Motrin IB® and generics) and naproxen (Aleve® and generics) can ease pain and inflammation. But they may cause stomach bleeding and high blood pressure, if taken over a longer time. Try to use them only for short periods.
- Acetaminophen (Tylenol® and generic) can also help reduce pain, but high doses can damage your liver. Make sure you take less than 4,000 mg a day.