## Joint care





#### JOINT CARE SUPPLEMENTS

Can they help us? In 2017, the nutritional supplement industry made about £32 billion in revenue, so people are buying them. But do supplements really work?

Unfortunately, we don't know the absolute answer, because there's a lack of well-designed, large scale randomized clinical trials in this area. However, some studies have found that certain supplements could provide moderate improvements in arthritis symptoms and progression.

Below are various common herbal supplements, vitamins and oils for arthritis and the evidence of their effects on joint pain. Also, some notes on why exercise is good for joint pain.

#### **GLUCOSAMINE**

This supplement may very well exert both analgesic and disease-modifying actions. Beware, though, because any positive effect is usually not super dramatic. A recent six-month study by Kwoh and colleagues didn't find any significant differences between a group taking glucosamine hydrochloride compared to a placebo group drinking diet lemonade daily. However, some researchers have pointed out that some benefit is seen when people take a glucosamine sulphate formulation, especially for longer than six months.

### **AVOCADO SOYBEAN UNSAPONIFIABLES (ASU)**

There is a generally positive trend for ASU in most small-scale trials that studied the effects of this supplement. Patients taking ASU required a lower dosage of traditional pain relievers. Overall, it appears that this supplement is most effective in patients with knee arthritis.

#### **CHONDROITIN**

Lab studies have revealed that chondroitin sulphate can suppress inflammatory pathways in the body. Some studies also postulate that this supplement can ward off or slow down the progression of joint damage.

### **METHYLSULFONYLMETHANE (MSM)**

Studies have shown that a 12-week course of supplementation with MSM led to significant reduction in both pain and physical disability. However, there's not much data regarding side effects or interactions with other medications for MSU

## **POLYUNSATURATED FATTY ACIDS (PUFAS)**

The ever-expanding health benefits of PUFAs seem to grow daily. Research has repeatedly revealed improvement in overall joint pain, as well as less need for conventional pain medications in patients with rheumatoid arthritis who take fatty acid Supplementation.

#### **GINGER EXTRACT**

There's evidence that ginger can have therapeutic benefits like over-the-counter pain relievers. The analgesic benefit has been shown in a few studies to be above and beyond a simple placebo effect. Studies are showing that it not only helps with pain, but also with morning stiffness.

#### VITAMIN D AND JOINT PAIN



A small study of five people with vitamin D deficiency noted that pain symptoms went away when the participants took vitamin D supplements. Another study predicted that adults with a vitamin D deficiency who are older than 50 are more likely to develop pain in their hip and knee joints. The study also noted that the pain

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is more likely to get worse if the deficiency isn't treated. Another study looked at vitamin D levels in people who have rheumatoid arthritis (RA), an autoimmune condition that causes the body to attack its own joints. The study found that most of the participants had low vitamin D levels. The researchers concluded that the low vitamin D levels were a complication of RA. Other studies have concluded that people with RA have low vitamin D levels from their corticosteroid medications.

#### **TURMERIC FOR JOINT PAIN**

Turmeric claims to reduce pain, inflammation and stiffness related to rheumatoid arthritis (RA) and osteoarthritis (OA) and helps treat bursitis.

Several recent studies show that turmeric/curcumin has anti-inflammatory properties and modifies immune system responses. A 2006 study showed turmeric was more effective at preventing joint inflammation than reducing joint inflammation.

A 2010 clinical trial found that a turmeric supplement called Meriva (standardized to 75 percent curcumin combined with phosphatidylcholine) provided long-term improvement in pain and function in 100 patients with knee OA.

In a small 2012 pilot study, a curcumin product called BCM-95 reduced joint pain and swelling in patients with active RA better than diclofenac, a nonsteroidal anti-inflammatory drug (NSAID).

#### **FATTY ACIDS - FISH OILS**



The two types of omega-3 fatty acids found in fish oil are DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid). EPA and DHA can reduce inflammation, which causes swelling and pain. Some studies have shown that the acids might also suppress

the body's immune system. Together, these factors can make fish oil a potential weapon against arthritis.

EPA and DHA can also help prevent heart attacks by making it harder for the blood to clot. They help lower blood triglyceride levels and blood pressure, too.

#### **EXERCISE - JOINT MOBILITY**

A workout program that includes a balance of three types of exercises -- range-of-motion, strengthening, and endurance -- can relieve the symptoms of arthritis, joint pain and protect joints from further damage.

Mobility exercises help maintain normal joint function by increasing and preserving joint mobility and flexibility. In this group of exercises, gently straightening and bending the joints in a controlled manner as far as they comfortably will go can help condition the affected joints. During a mobility exercise program, the joints are stretched progressively farther until normal or nearnormal range is achieved and maintained. This helps to maintain comfort while function is preserved. This in turn unthickens the fluid around the joint, enabling the joint to become free moving with less pain.

#### **EXERCISE - STRENGTH WORK**

Strong muscles help keep weak joints stable and comfortable and protect them against further damage. A program of strengthening exercises that targets specific muscle groups can be helpful as part of your arthritis treatment. Working on muscular endurance will ensure you don't push too heavy a weight yet gain stronger joint stability.

#### **EXERCISE - STRETCH AND FLEXIBILITY**

Ensuring that the joint is flexible means that you will maintain the range of movement which the joint is supposed to have. This also helps to prevent muscular injuries which in turn can hinder the joint support