

Nutrition for Joint Health & Arthritis

It is always best, if you can, to get nutrients through the food you eat. However, modern diets often fall short of recommended intakes of key nutrients and, when tested, many people have been found to be deficient. Deficiency is even more likely after injury when the demand for nutrients increase. Other supplemental compounds may have been found to be beneficial but are not readily available from food sources.

This article explains the key nutrients and supplements for **joint health**, including when and how to supplement with them.

Nutrients / Supplements

Collagen

Collagen amounts to 25–35% of total protein in mammals, which makes it the most abundant protein in our bodies. The collagen in joint cartilage is 80–90% type-II collagen.

Current research suggests that undenatured type-II collagen (UC-II) may reduce swelling, joint pain, and stiffness in cases of moderate-to-severe osteoarthritis and both juvenile and adult-onset rheumatoid arthritis.

As with chondroitin and glucosamine, two other components of cartilage, there is some evidence that collagen may reduce cartilage loss.

Vitamin C

Vitamin C is necessary for collagen formation, so having low levels of vitamin C can be detrimental to joint health. However, the Recommended Daily Intake (RDI) is easily attained through the diet, so supplementation is usually unnecessary. Best food sources of vitamin C are fruits and vegetables specifically citrus fruits, red and green peppers and kiwi fruits.

Boswellia serrata

Boswellia serrata is a plant used in Ayurvedic medicine notably to alleviate joint pain. Boswellia serrata extracts have long been used for the treatment of musculoskeletal disorders, given their marked anti-inflammatory activity and their ability to promote tissue regeneration.

Research suggests that it could be as effective as some pharmaceuticals for the purpose of alleviating joint pain and improving knee flexibility in people with osteoarthritis. Studies on Boswellia serrata tend to use one of two patented extracts: 5-Loxin and Aflapin.

Curcumin

Curcumin is a component of the spice turmeric. Curcumin has been found produce a wide range of positive effects including reductions in inflammation and pain. When supplemented by people with knee osteoarthritis, curcumin has been reliably shown to alleviate pain and help improve mobility.

Unfortunately, standard curcumin preparations are very poorly absorbed into the body. Therefore, new formulations that increase absorption have been developed. Currently, the formulation with most supporting research is “Meriva”.

Chondroitin

Studies on knee osteoarthritis suggest that supplementation of chondroitin (a component of cartilage) can reduce water retention in inflamed joints, improve mobility, and reduce pain. Like collagen and glucosamine, chondroitin is a component of cartilage, and there is some evidence that it may reduce cartilage loss.

Chondroitin and glucosamine may have anticoagulant properties. This could be a problem for people taking blood thinners, be they anticoagulants (such as warfarin/Coumadin) or antiplatelet agents (such as aspirin).

Glucosamine

Like collagen and chondroitin, glucosamine is a component of cartilage, and there is some evidence that it may reduce cartilage loss.

For the treatment of knee osteoarthritis, there are more trials on glucosamine (a component of cartilage) than on any other supplement. Pooled results show a reduction in pain and an improvement in function.

These results are generally modest on average, but individual improvements vary significantly. In some people, glucosamine relieves pain as well as paracetamol. In others, it has no effect. People taking glucosamine should monitor their symptoms to better assess if this supplement works for them.

Glucosamine and chondroitin may have anticoagulant properties. This could be a problem for people taking blood thinners, be they anticoagulants (such as warfarin/Coumadin) or antiplatelet agents (such as aspirin).



Supplementing Guide

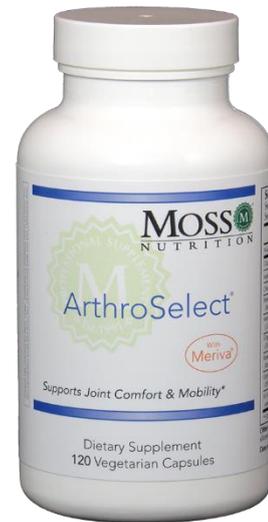
Option 1

Supplement with Arthroselect (Moss Nutrition).

Arthroselect provides blend of micronutrients, anti-inflammatory compounds, botanicals and herbs shown to positively impact osteoarthritic symptoms.

Includes:

- Glucosamine Sulfate
- Chondroitin Sulfate
- Undenatured Type II Collagen
- Curcumin (Meriva form)
- Boswellia Serrata



Pros – Cheaper and more convenient than supplementing separately.

Cons – Lower doses of some recommended nutrients than if supplemented separately.

Option 2

Supplement separately with:

1. Glucosamine Sulfate & Chondroitin Sulfate combination
2. Curcumin &/or Boswellia
3. Undenatured Type II Collagen

Amrita Nutrition

We are delighted to partner with Amrita Nutrition to provide our patients access to a full range of practitioner-grade supplements with **10% off** all orders. To activate your discount simply register with [Amrita Nutrition](#) using invite code – YCMZQD.

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Boswellia serrata

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