

# Oh, My Aching Joints!

Hans Conser, DC

Let's take a brief look at the current science of supplementation for joint pain, including my own clinical experience, and then we'll go over the bigger picture of body inflammation, hydration, and some neuro-structural considerations. Of course, this information is not a substitute for seeing your health-care practitioner, but will help you make more informed decisions in dealing with joint pain.

## Joint Supplement Science

There are a handful of controlled, double-blind studies on glucosamine, chondroitin, MSM and Boswellia.

The problem is that the vast majority are for osteoarthritis, which is a very advanced and difficult to treat form of joint damage. They also never exclude NSAID use (nonsteroidal anti-inflammatory drugs) and NSAIDs inhibit cartilage repair.

With any sort of inflammatory disorder, the supplement with the greatest quantity and quality of science behind it, by far, is fish oil. EVERYONE should supplement with fish oil.

## Joint-Pain Supplementation Clinical Observations

I have about twenty-five years of clinical experience with the various supplementation schemes for joint issues. Here are my observations:

**Chondroitin and Glucosamines:** These sulfur-bearing, biological polymer building-blocks rarely give good results and I have seen allergic reactions to them all too often. This is likely due to their high sulfite content, and the fact that most are derived

from shellfish. I never recommend these to anymore.

**Boswellia:** Derived from an east Indian tree yielding a resin used medicinally as an anti-inflammatory, this works well for some people, but is definitely hard on the gut. Many people experience an intolerance in the gut when taking Boswellia. It is a less strong cyclo-oxygenase inhibitor and seems to have a similar action as do the NSAIDs, that is, it's an anti-inflammatory but doesn't seem to help joint-rebuilding directly.

**Kaprex™:** An extract of hops, rosemary and olive leaf that works well for some people but not others. I believe this to be due to variations in the underlying cause. If your joint problems are due to an underlying pro-inflammatory state, then Kaprex works great. I have not seen any gut problems with Kaprex, but it is expensive.

**Aloe Vera:** The allantoin in Aloe has been shown to increase cell turnover. This can be helpful to speed up cartilage repair.

**Runner's Edge™:** An antioxidant enzyme supplement that will clear "grit" out of joint fluid if you give it time.

**Wobenzyme™:** The original proteolytic enzyme anti-inflammatory supplement with a lot of science behind it. The proteolytic enzymes break down the protein signaling molecules to mitigate the inflammatory cascade process.

**Acute™:** A very effective enzyme supplement. This one also has other ingredients besides the enzymes to promote effective healing. A great alternative to NSAIDs without any liver or kidney toxicity, and in my experience, more effective than Wobenzyme.

**Vitamin D:** Best from the sun, essential for normal immune function.

**Hyaluronic Acid:** Pulls moisture into the tissues. Best from food, including most whole fruits and vegetables, especially starchy root vegetables, help the body to retain moisture and assist the body in its own lubrication; likewise, stock prepared from bones and joints of wild or humanely-raised animals. This is also good taken as a supplement.

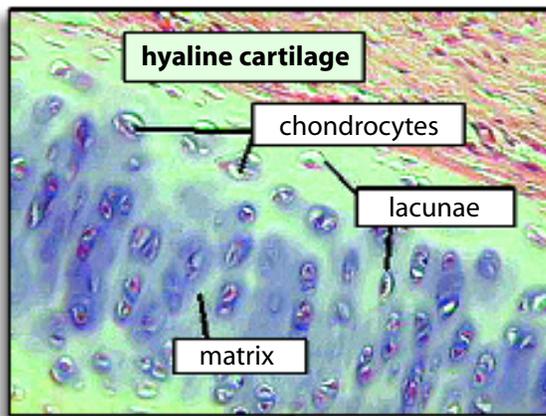
**Methy Sulfonyl Methane (MSM):** This is basically a highly-bioavailable form of sulfur—my favorite supplement for joint pain. About 80% of people who use it notice a positive improvement. Easy to use—just buy it in bulk and mix it with water. Inexpensive, too, but don't bother with the Chinese-sourced stuff; it's not worth it. If you aren't low in sulfur, MSM may not help. People who respond to chondroitin/glucosamine typically respond even better to MSM by itself. If you are low in bioavailable sulfur, it will soften up and hydrate scarred-up and thickened connective tissue and improve cartilage repair rates.



The above is not a complete nutrient list for cartilage repair. Other known nutrients for this include vitamin C, zinc, copper and manganese.

### The Pro-inflammatory State and Joint Pain

Sometimes the joint is just where the inflammation is being expressed. A diet high in Omega-6 fatty acids and refined carbohydrates and/or excessive calories are all asso-



ciated with a pro-inflammatory balance. Some other factors that promote inflammation in the body include food allergies, impaired detoxification pathways (in which case your kidneys and liver may need cleansing), acidity (from high-acid foods and beverages, medications and stress), and chronic infections.

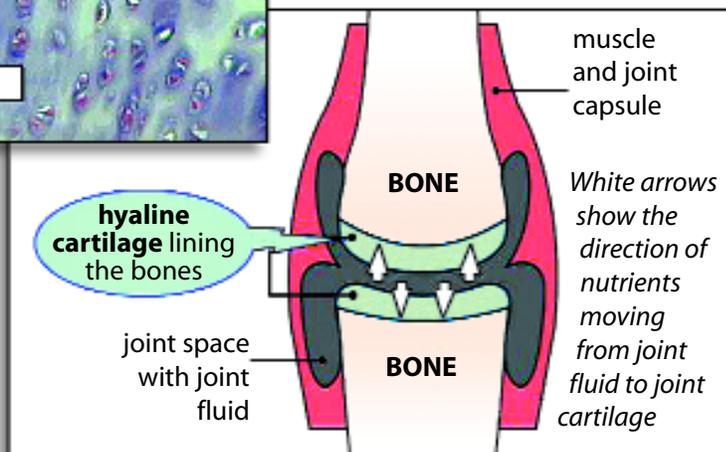
### Hydration

You need both general hydration (drinking and absorbing water) and local hydration, that is, getting fluids inside the cartilage itself. There are two known ways to accomplish this. One is through hyaluronic acid since it pulls moisture into the tissues. As mentioned, the best food-source known for hyaluronic acid is any soup stock made from bones (also available as a supplement). The second factor is

the mechanical action of the joint. Joint cartilage, known as *hyaline cartilage* is like a very smooth and slippery sponge. Like all connective tissue it consists of living cells within a non-living matrix.

### Hyaline Cartilage

As shown in these illustrations, the cartilage-building cells (called *chondrocytes*) in this matrix have a little space like a pool that they live in called *lacunae*. It's important to note that hyaline cartilage contains no blood vessels! The only way those cells get the oxygen, blood sugar and nutrients they need to survive and thrive is to absorb the joint fluid directly through movement.



This is called imbibition—the direct drinking in of water. When you put weight on your knee, it compresses the cartilage “sponge” and squeezes water and waste material out. When you pick up your leg, it de-compresses the “sponge” allowing it to absorb water and nutrients again. This is essential for the normal nightly burst of cartilage repair in the body.

### Neuro-Structural Integrity

If your knee is misaligned, it can be compressed in one area and not another. This spot will have accelerated cartilage wear, and reduced repair, because it is not decompress-

ing and getting the imbibition it needs.

Often knee alignment is secondary to hip and low-back alignment, which is secondary to neck alignment. If your neck is missing its natural curve, that puts tensile stretching forces on the spinal cord, which usually increases nerve tension throughout the body. Since nerves cross joints and the spinal cord contains more important tissue than a knee, the body will compress the knee trying to reduce the pulling on the spinal cord. In this case, the entire knee may not effectively decompress at all.

It may sound strange that having a good chiropractor work on your neck and spine can improve your knee pain, but time and time again I hear my clients tell me how much better their knees feel after a few sessions.

So if you have aching joints, experiment with the above joint supplements with the assistance of your practitioner, and be aware of other factors, like the overall tendency to inflammation in the body. Drink plenty of water and take a close look at the possibility of any loss of neuro-structural integrity. ■

### Bozeman's BodyMind

Chiropractor, Dr. Hans Conser, DC, offers Network Chiropractic and science-based, individualized supplementation, weight-loss and detoxification programs at his office,



Amazing Touch Chiropractic, in downtown Bozeman. Dr. Hans can be reached at 595-1928. Schedule appointments online at [www.BozemanChiropractic.com](http://www.BozemanChiropractic.com).

(See back cover.)