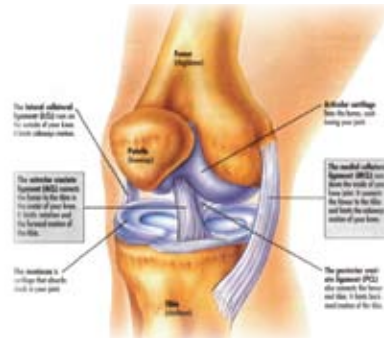


# JOINT EASE

Joints allow your body to bend, fold and move. The tough cartilage that separates bones in joints prevents them from grinding together when your muscles pull on them, even though gravity is working to squeeze your bones together under your weight. Under their thick, resilient flexible covering of cartilage, your bones should never actually touch but should enjoy a comfortable cushioned ride.<sup>1-3</sup>

Just as machine parts require lubrication, the cartilage in your joints is bathed in a thick, oil-like fluid – the synovial fluid. It's called this because it's secreted into the joint by the synovial cells that make up the tissue capsule that surrounds each joint and helps keep the fluid and cartilage-covered bones in place. But cartilage-covered bones don't just slide over each other as if they were ball bearings in a machine. The cartilage itself isn't thick enough to withstand the pressure of your weight.

Here's what happens: when you take weight or pressure off a joint, its cartilage swells with synovial fluid, much as a sponge takes in water. Then, when weight or pressure is reapplied to the joint, the fluid is squeezed back out of the cartilage into and joint space. The greater the pressure, the more viscous the synovial fluid becomes (a marvel of nature and not something motor oil is able to do) and the smoother the joint operates.



The 4 members of the “joint team” – bone, cartilage, synovial cells and synovial fluid – work in concert, together and with your muscles, to produce smooth and painless motion.

Unfortunately, joints are not eternal motion machines. Over time, wear and tear gradually and inevitably “wear out” the cartilage covering, and it becomes thinner and thinner.<sup>4-7</sup> As cartilage thins, it attempts to heal itself. However, it just can't keep up and sooner or later the cartilage becomes inflamed.<sup>1,8-13</sup> Although this represents a crude effort by cartilage to heal itself, it only makes matters worse. Inflammation in a joint accelerates the erosion of cartilage, prevents the synovial cells from filling the joint with synovial fluid and causes pain (a message to you to stop using the joint) and immobility – loss of joint rotation, decreased flexibility and inability to carry weight).<sup>14-16</sup>

Is there any hope?

Yes, if you know what to do.

## *Smooth Movement, not Grinding*

Like any other part of the body, joint tissues are able to heal minor damage and improve their function if they are fed the nutrients they require. Unfortunately, it doesn't take much wear and tear before joint tissues are unable to keep up, especially if they are forced to build from scratch the large and complicated molecules that make up cartilage and synovial fluid. On the other hand, these tissues happily respond to being supplied with larger building blocks that make their jobs as carpenters and stone masons much easier. When given these materials to work with, joint tissues repair and rebuild more quickly and more completely.<sup>17-20</sup> The result: better joint function with less pain.



These “advanced” building blocks are provided by **Joint Ease**, state-of-the-art nutrition for joints. **Glucosamine** is a fundamental structural component of almost every part of the joint.<sup>1,20-23</sup> **Methylsulfonylmethane** provides cartilage and synovial cells with the special organic forms of sulfur that, more than any other tissue in the body, they need to stay healthy.<sup>24-26</sup> **Hyaluronic acid** is itself an important component of synovial fluid and

can go to work immediately.<sup>27,28</sup> **Shark cartilage** provides all of the materials a joint needs to complete its “home improvement” program.<sup>29-32</sup> In addition, because inflammation causes tissue-destroying oxidative stress,<sup>33</sup> extracts of **Boswellia**,<sup>34</sup> **white willow bark**<sup>35</sup> and **grapes**<sup>36-38</sup> provide anti-oxidant power and can help the immune system “cool off” inflamed joint tissues and help restore balance to joints suffering from excessive breakdown caused by inflammation.

## *Joint Ease – for easy movement*

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