Exercise Poses Virtually No Danger to Your Joints

There is no good evidence supporting a harmful effect of regular exercise on normal joints, according to a review of studies.

Exercise is beneficial for weight control, management of cardiovascular disease and diabetes, and improving psychological well-being. However, there is also a perception that exercise is potentially harmful to joints, in particular those of the lower extremities.

Researchers reviewed existing studies on the relationship between regular exercise and osteoarthritis (OA) and concluded that in the absence of existing joint injury there is no increased risk of OA from exercise.

Sources:

- Eurekalert January 27, 2009
- Journal of Anatomy January 21, 2009; 214(2): 197-207

Comments:

Osteoarthritis of the knee is one of the most common causes of disability in the U.S. More than 10 million Americans suffer from knee osteoarthritis; women being more commonly affected than men.
Unfortunately, most people have little appreciation for how powerful exercise can be in preserving bone density and joint function, which can help prevent and alleviate both osteoporosis and osteoarthritis as you age.

What is Osteoarthritis?

Osteoarthritis usually affects your distal joints, or the joints at the end of your fingers and toes, not the middle ones. Additionally, it’s not symmetrical, so typically you may have it on just one joint and not the other. For example, you may have osteoarthritis on just one knee.

Exercise Will NOT Wear Out Your Knees!

The review published in the *Journal of Anatomy* provides an overview of the risk factors for the development of osteoarthritis, and the particular role and impact of physical exercise. The authors reaffirm that the notion that exercise is detrimental to your joints is a misconception, as there is no evidence to support this belief.

The only time exercise may exacerbate osteoarthritis is if you’ve suffered a prior joint injury.

Said lead researcher David Hunter MD PhD of New England Baptist Hospital:

"We found that in elite athletes where there was more likelihood of obtaining sports injuries, there was an increased risk of OA in the damaged joints, but in most people vigorous, low-impact exercise is beneficial for both its physical and mental benefits.

The largest modifiable risk factor for knee OA is body weight, such that each additional kilogram of body mass increases the compressive load over the knee by roughly 4kg".

Instead, the evidence points to exercise having a positive impact on joint tissues -- if you exercise sufficiently to lose weight, or maintain an ideal weight, you can in fact reduce your risk of developing osteoarthritis rather than increase your risk. Not to mention the numerous other health benefits you gain from exercise. Other studies have shown that regular exercise can help:
• Reduce diabetes by reducing insulin resistance
• Promote weight loss without dieting
• Reduce effects of aging
• Cut cholesterol levels in men with type 1 diabetes
• Reduce ovarian cancer risk
• Prevent impotence

It’s simply a myth that you can ‘wear down’ your knees just from average levels of exercise and/or normal activity.

Is it Safe to Run?

You may know I started running in 1968 and have run about 1,000 miles a year since that time. I’ve logged in more than 40,000 miles of running in my lifetime. One would think that if running damaged the knees I might have knee pain, but that has never been an issue for me.

My bias has always leaned toward running, which I do to this day, and as some scientists have discovered, the human body was most likely designed for endurance running.

Over the last few years I have a far more balanced program and only run about 750 miles per year. I have replaced some of the running with anaerobic workouts, plyometrics, core and strength training, and tennis. The variety of exercises has allowed me to be the fittest I have ever been in my life.

However, despite my experience, and the scientific literature, many experts still advise against running as a form of exercise, stating it may be too rough on your knees and can accelerate osteoarthritis. However, research findings contradict this popular belief as well.

A recent study in the American Journal of Preventive Medicine, for example, found no evidence of accelerated rates of osteoarthritis among middle- to older-age long-distance runners.
As an additional plus, weight-bearing exercise like running can also help stave off osteoporosis (weakening of your bones) -- which is another extremely common problem among the elderly -- by maintaining bone mineral density.

“I Already Have Osteoarthritis… What Can I Do?”

If you’ve already developed osteoarthritis in your knee, you’ll want to incorporate exercises that strengthen the quadriceps muscle at the front of your thigh. And, rather than running, you may be better off with non-weight-bearing exercises like swimming and bicycling.

Jump-starting an exercise program can be frustrating at any age or fitness level, especially if you already have a health condition such as osteoarthritis. However, it will benefit you greatly to make the effort to implement a regular fitness regimen, no matter where you are currently.

If you don't know where to begin, I have plenty of free tools on my Web site to help you get started. My beginners’ exercise page includes plenty of tips and guidelines, as well as links to other helpful information.

Treatment Options for Osteoarthritis

Since osteoarthritis can be a very painful condition, pain relief is usually on the top of the list. Typically, anti-inflammatory approaches such as non-steroidal anti-inflammatories (NSAIDs) and analgesics, like Tylenol, are used for this purpose.

However, while these can be effective pain relievers, it’s very important to understand that the regular, chronic use of these types of medications are associated with significant, and very serious, side effects such as kidney and/or liver damage. In the U.S. overuse of analgesics such as these are very common sources of kidney failure.

NSAIDs also kill some 30,000 people every year due to bleeding ulcers, and the oral drugs have been linked to a host of problems, including heart failure -- Vioxx and Celebrex being prime examples of these very real dangers. This is not to say that they are not useful agents in some cases, however you need to use them very cautiously.
This is also why it’s so vital that you seek out the underlying cause of your problem and treat it “at the root,” so you do not need to pursue these types of medications. This is most effectively done by addressing your diet and exercise habits.

Here are my top natural approaches for treating osteoarthritis:

• Get plenty of omega-3 fats by taking a high-quality krill oil. Omega-3s are an essential component that your body needs to reduce inflammation.

• Implement a regular exercise program.

• Eat a healthier diet based on the principles of nutritional typing. Your unique biochemistry and genetics influence the ratio of fat, protein and carbohydrates your body needs to thrive, so eating for your nutritional type will ensure that you get the optimal macronutrient ratio out of your diet.

• Rely on safer anti-inflammatory alternatives for pain relief, such as:
  ◦ Glucosamine
  ◦ Boswellia
  ◦ Acupuncture