

# Managing Osteoarthritis With Exercise

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**A**rthritis means “inflammation of a joint”. Osteoarthritis is a degenerative joint disease. It is also one of the oldest and most common forms of arthritis. Osteoarthritis affects about 27 million Americans over the age of 25. Unlike rheumatoid arthritis (inflammatory disease), a degenerative joint disease stays localized in the affected joint. Osteoarthritis is characterized by a progressive loss of cartilage – mostly in hands, spine, hips, and knees. This breakdown removes the buffer between bones causing a bone against bone friction. The result of this degeneration is joint pain, swelling, limited range of motion, and stiffness. As the opposing cartilage surfaces wear away, the knee collapses causing deformities such as being bowlegged (varus) or knock kneed (valgus). These deformities can contribute to pain and functional losses of the knee.

## **How does osteoarthritis develop?**

Genetics, joint injuries (sports, accidents, work-related), obesity, and aging are the most prominent risk factors that cause the development and progression of osteoarthritis.

Osteoarthritis should be diagnosed by your doctor and X-rays can confirm the condition.

## **Can exercise help?**

The short answer is “yes”. Vigorous exercise, jogging or running (if the hip or knee is involved), is not

recommended. Instead, select low-impact or non-impact activities - walking, elliptical, swimming, or biking. Wearing shock-absorbing shoes or using a cane can be helpful. In the recent past, flexibility exercises were the standard recommendation to help maintain or improve joint mobility. The goal of improving flexibility is still vital, but muscle exercises to improve strength are also recommended. Your physician, physical therapist, or trainer can instruct you on the proper use of equipment (tubing, weights, isometric exercise). Flexibility exercises are most beneficial if done daily. Depending on your current fitness condition, strength training and cardiovascular training should progress gradually. Switch routines regularly so that the joints are stressed from different angles and with different intensities.

## **Alternative Treatment Choices**

Nonsteroidal anti-inflammatory drugs (NSAIDs) can relieve pain and reduce inflammation. Over-the-counter NSAIDs include ibuprofen (Advil, Motrin, others) and naproxen sodium (Aleve). Stronger versions of these NSAIDs and others are available by prescription. Oral NSAIDs can cause stomach upset, so some prescription NSAIDs come in a patch that you affix to your skin or in a gel form that you can rub on the painful joint.

Working with a fitness specialist or physical therapist, there are heat

and cold therapies that can reduce inflammation and ease pain.

Managing weight can have a significant positive effects. The more weight your knees and hips need to carry and balance, the more damage will be caused over time. Reducing weight will help lessen the progression of osteoarthritis.

There are also surgical options ranging from injections to joint replacement. Viscosupplementation involves injections of hyaluronic acid derivatives (Hyalgan, Synvisc) and may offer pain relief by providing some cushioning in your knee.

In joint replacement surgery (arthroplasty), a surgeon removes your damaged joint surfaces and replaces them with plastic and metal devices called prostheses. The hip and knee joints are the most commonly replaced joints. Surgical options should only be used when severe osteoarthritis is present with pain. Consultations with a physician can determine whether that course would be necessary.

## **Additional Resources for Information**

Arthritis Foundation – [www.arthritis.org/conditions/exercise/default.asp](http://www.arthritis.org/conditions/exercise/default.asp)

John Hopkins Arthritis Center – [www.hopkins-arthritis.com.jhmi.edu/mngmnt/exercise.html](http://www.hopkins-arthritis.com.jhmi.edu/mngmnt/exercise.html)

Medline Plus – Arthritis: [www.nlm.nih.gov/medlineplus/arthritis.html](http://www.nlm.nih.gov/medlineplus/arthritis.html)

## Osteoarthritis



Healthy Knee Joint

Hypertrophy and spurring of bone and erosion of cartilage