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## Six Steps to Ease Painful, Achy Knees

From Harvard Medical School

Knees and Hips: A Troubleshooting Guide to Knee and Hip Pain

Knees and hips must bear your full body weight while allowing for a wide range of motion, making them susceptible to injury and arthritis. This report covers a wide range of knee and hip conditions and describes treatments and preventive strategies. Hip and knee replacement surgeries are also covered in detail.

The achy, balky knee: Everyone seems to have one at some time or another. To make sure you know what to do if your knees act up, here are six tips on how to prevent knee problems or treat them while they're mild.

**Stay active.** The knee was made to bear weight, but wasn't designed to go it alone. Strong, flexible leg muscles take a great deal of pressure off this joint. That means exercise is key to healthy knees. And there's a bonus - exercising your knee causes synovial tissue in the joint to produce synovial fluid, which lubricates the knee and nourishes cartilage.

**Easy does it.** Take it slowly when starting an exercise program. Too many people try to reform overnight, only to injure themselves or get discouraged when the exercise seems too difficult or boring. They stop and are right back where they started - sitting around getting creaky.

**Simple is the solution.** You don't need to buy expensive treadmills or contraptions. To get started, all most people need is a good pair of walking shoes, a level surface (the mall, a high school track, a well-maintained sidewalk), and, the hardest part of all, some willpower.

**Walk in water.** Especially if you have osteoarthritis, walking in water is a great way to exercise your knee without putting too much weight on it. Chest-high water reduces the weight on your knee by about 75%. Biking also exercises knees - and the quadriceps - without putting weight on them.

**Price is right.** The traditional recipe for treating a knee that swells up and gets sore is RICE: rest, ice, compression (wrapping it in an elastic bandage, but not too tightly), and elevation (which drains away fluid and blood). Physical therapists have added protection as a first step, so RICE becomes PRICE. Physical therapists can help you identify activities that contribute to the problem and show you ways to avoid injuries in the future.

**Do the homework.** If you try physical therapy, you'll probably be put on an exercise program - and get coaching to help you stick with it. Physical therapy works best if the patient follows through by learning the exercises and doing them at home.

### Understanding Common Knee Problems

**Bursitis.** Bursae are thin sacs that pad your joints and bony outcroppings, reducing friction between the movable parts. You can get bursitis from banging your knee or putting pressure on it. Bursitis is best treated with PRICE and pain relievers.

**Tendonitis.** Tendons attach muscle to bone. They're designed to move and stretch, but if overused or stretched too far, they become inflamed.

**Bursitis and tendonitis feel much the same.** But the location of the discomfort is different and bursitis, unlike tendonitis, hurts even when you aren't moving your knee. The treatment for the flare-ups is the same - PRICE.

**Osteoarthritis.** Cartilage covers the end of the thighbone (femur) and the back of the kneecap. The two crescent-shaped menisci that provide the padding between your femur and your shinbone are made of fibrocartilage, which is tougher and more rubbery than the hyaline cartilage that covers the ends of bones. When that cartilage starts to break down, pit or decay, the result is osteoarthritis. If pain from osteoarthritis flares up, follow PRICE.

For more information on common knee conditions and treatments and preventive strategies for your knees and hips, order our special health report *Knees and Hips: A Troubleshooting Guide to Knee and Hip Pain* [www.health.harvard.edu/KH](http://www.health.harvard.edu/KH).