

Understanding Aches, Pains and Body Mechanics

By Charles Stuart Platkin

How can you avoid body aches and pains? Ask the experts. Marilyn Moffat, a professor at New York University, and Carole B. Lewis, an adjunct professor at George Washington University College of Medicine wrote the book on the topic titled *Age-Defying Fitness: Making the Most of Your Body for the Rest of Your Life* (Peachtree, \$19.95).

Is it possible for a 60-year-old to be as limber as Gumby?

To regain that Gumby-like flexibility would require a real commitment, but it is possible. An study published in the *Journal of Geriatric Physical Therapy* in 2007 found that if older people stretched five days a week for six weeks, holding the stretch for 60 seconds and repeating it four times, they could improve their ankle movement by more than 12 degrees.

The key is to be very specific in what you are trying to stretch and hold the stretch for 60 seconds. Do it five days a week, and repeat each stretch four times. Try to incorporate stretching into your daily activities. Stretch your shoulders while cooling down during your aerobic activity. Do ankle range of motion by rising up on your toes. Raise your toes up off the floor while you're brushing your teeth. Stretch your spine by reaching for the floor or twisting right and left while sitting at your desk.

Can you pick four simple ways to stay limber in 10 minutes a day?

Ten minutes is not quite enough time to get benefits in all areas of fitness, but it's a start. Here's a routine to get you started on a total fitness program that affects posture, strength, flexibility, balance and endurance.

10-minute exercise program

1. Stand on one leg and then the other for a minute each (balance) = 2 minutes
2. Do the combined Pelvic Tilt and Chin Tuck (see exercise for back and knee pain below) 10 times (posture and core strength) = 2 minutes
3. Run in place or walk as fast as you can, or bring one knee and then the other up to the chest as quickly as possible for four minutes (endurance) = 4 minutes
4. Do a leg stretch. Stand straight, move right foot forward, keep heel on the floor. Put weight on left leg and bend it slightly. Lean forward and push your buttocks backward keeping that right leg as straight as possible. Reach for your right toes with right hand. Then reverse. 1 minute on each side (flexibility) = 2 minutes

This program is not optimal. To really get an endurance benefit, you need to devote 30 to 40 minutes four to seven days a week to moderate aerobic exercise.

What is a tendon vs. a ligament vs. a joint vs. a muscle?

Tendon: Attaches muscle to bone.

Ligament: Holds bones together at the joint and stabilizes the joint.

Joint: Where two bones meet; they connect one bone to the other.

Muscle: The tissue that shortens and lengthens to enable joints to move and thus allow the body to move.

What's the difference between arthritis, tendonitis, bursitis, sore muscles and a sprain?

Arthritis is inflammation of a joint. This can be caused by weakness, genetic predisposition, muscle and joint imbalance, use of a traumatized joint, and other problems. Joints have a cushion of cartilage that starts out thick, smooth and well lubricated and then gets worn down. That's when arthritis sets in.

Tendonitis is an inflammation of a tendon. It is usually caused by overuse.

Bursitis is inflammation of the bursa (tiny fluid filled sacs between muscle layers that help the muscles move over one another more easily). This is usually caused by overuse.

Sore muscles usually occur because of the buildup of lactic acid from over-exercising. This is normal and will dissipate once you resume activity. The exception would be if the muscle were torn or bruised.

A sprain is an injury to the ligaments. This is usually caused by something like turning your ankle while walking.

Back, neck and knee pain are common problems. Can you recommend a simple, helpful exercise?

For neck and back pain: Try this combination of a Chin Tuck and a Pelvic Tilt: Lying on the floor, pull in your chin and lengthen the back of your neck while tightening your stomach and flattening your lower back against the floor. Hold 10 seconds, breathe deeply and relax. Repeat 20 times.

For knee pain: Try Wall Slides. Stand with your back against the wall (and feet far enough away from it so that when you slide down, your knees are over or behind your ankles to protect your knees). Slide down the wall until you are in a sitting position (about 1/3 to halfway down the wall -as long as your knees feel comfortable). Be sure your knees are tracking straight as you go down. Hold 10 seconds and slowly increase to 60. Repeat three times a week every other day.

What are bad strength-training techniques?

Lifting weights that are too heavy, using jerky motions, not following through the entire range of motion, lifting too quickly, and not maintaining good postural alignment while performing the exercises.

Yoga vs. Pilates vs. stretching--which is best?

Yoga, because many of the Pilates activities (which are mostly core work) come from yoga principles.

Free weights vs. machines?

Free weights, because they are cheaper, easier to take places, and each side of the body must work independently (whereas on machines, the stronger side can do more of the work).

Best "all-around" exercise?

The plank (a yoga move--simply stay in the up position for a push-up) for strengthening.

Worst "all-around" exercise?

Full sit-ups or hundreds of fast "crunches."

Swiss ball/ Physio Ball vs. exercise bands?

The exercise band is better. It can work every muscle in the body, and it also travels easily.