

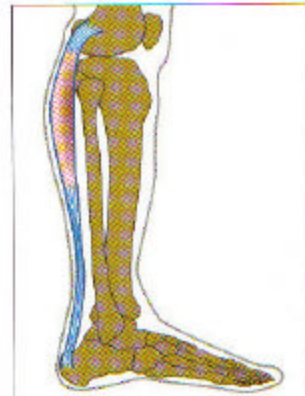
Critical Attachments

You want to get bigger and stronger? Then take care of your tendons.

You've put in the work and grown your body. You've got triceps like canned hams and tree-trunk quads. You can run and jump and twist and push. You've conditioned your muscles for size and strength, and you see the benefit every day. Way to go.

If only you knew how precarious your position of power is. These magnificent muscles work because your tendons, strong cords of tissue that connect them to your skeleton, are doing their rather sizeable job. But if you've added size and strength to your muscles without conditioning your tendons, something's bound to give.

"The tendon is built like a stiff bungee cord," says Fred Azar, M.D., team physician for the NBA's Memphis Grizzlies. "The [tendon] fibers are interwoven, which guarantees their strength, but that means they aren't very elastic and are prone



ACHILLES TENDON

The strongest tendon in the human body is only as thick as your thumb. Without it, you wouldn't be able to lift your heel during a run.

to injury. While muscles can stretch extensively in length in response to stress, tendons remain relatively fixed."

So ignore your tendons and you'll end up on the sidelines with inflammation (called tendinitis), or worse, a tear or rupture. All of which makes it important to recognize the early symptoms of a tendon problem and take care of it. Here are some classic tendon troubles and how to avoid them.

THE ACHILLES TENDON

Why it could blow: Because the Achilles tendon is in constant demand—particularly with people who play court sports or run, or who have suddenly increased activity—it's that much more vulnerable to injury and overload.

Symptoms: Stiff, swollen ankle and pain that radiates into the calf muscle.

The fix: Let pain be your guide, says Henry Goitz, M.D., chief of sports medicine at the Medical College of Ohio and a spokesman for the American Academy of Orthopaedic Surgeons. Back off your activity until you're pain-free, or participate until you feel bothered. Also make sure you're getting enough support from your shoes. Adequate cushioning is the key, says Dr. Goitz. Avoid surfaces that are too hard, like asphalt basketball courts, or too soft, like sand.

Won't happen if you do this stretch: Stand up straight, your feet hip-width apart. Take a step forward, shift your weight onto your front foot, keeping the heel of your back foot firmly on the ground. It's also important to keep your front knee in line



SUPRASPINATUS TENDON

Part of the rotator cuff, this tendon runs under the top of the shoulder and is about as thick as a doubled shoelace.

with the toes of your foot. Hold for a count of 10, change legs. Do four repetitions of each.

THE PATELLAR TENDON

Why it could blow: You put it under the gun every time you run, jump, or squat.

Symptoms: Patellar tendinitis, also called jumper's knee, results from a tiny tear in the tendon and causes pain when you extend your knee. Inflammation of the patellar tendon at its lowest point in the kneecap is called runner's knee and is especially painful.

The fix: When increasing your training, either on the squat rack or on cardio machines, never increase your load more than 10 percent a week. Also, make sure your shoes have adequate padding and support.

Won't happen if you do this stretch: Stand upright, your feet hip-width apart. Bend one leg behind you. Reach back with both hands, grab your foot, and pull your heel towards your but-

tocks. Now bend your standing leg slightly. (For better balance, it helps to fix your eyes on a point in front of you.) Hold for a count of 10, then switch sides. Do five repetitions each. If you already have knee problems, reach across, behind your lower back, so your left hand grabs your right foot, and vice versa.

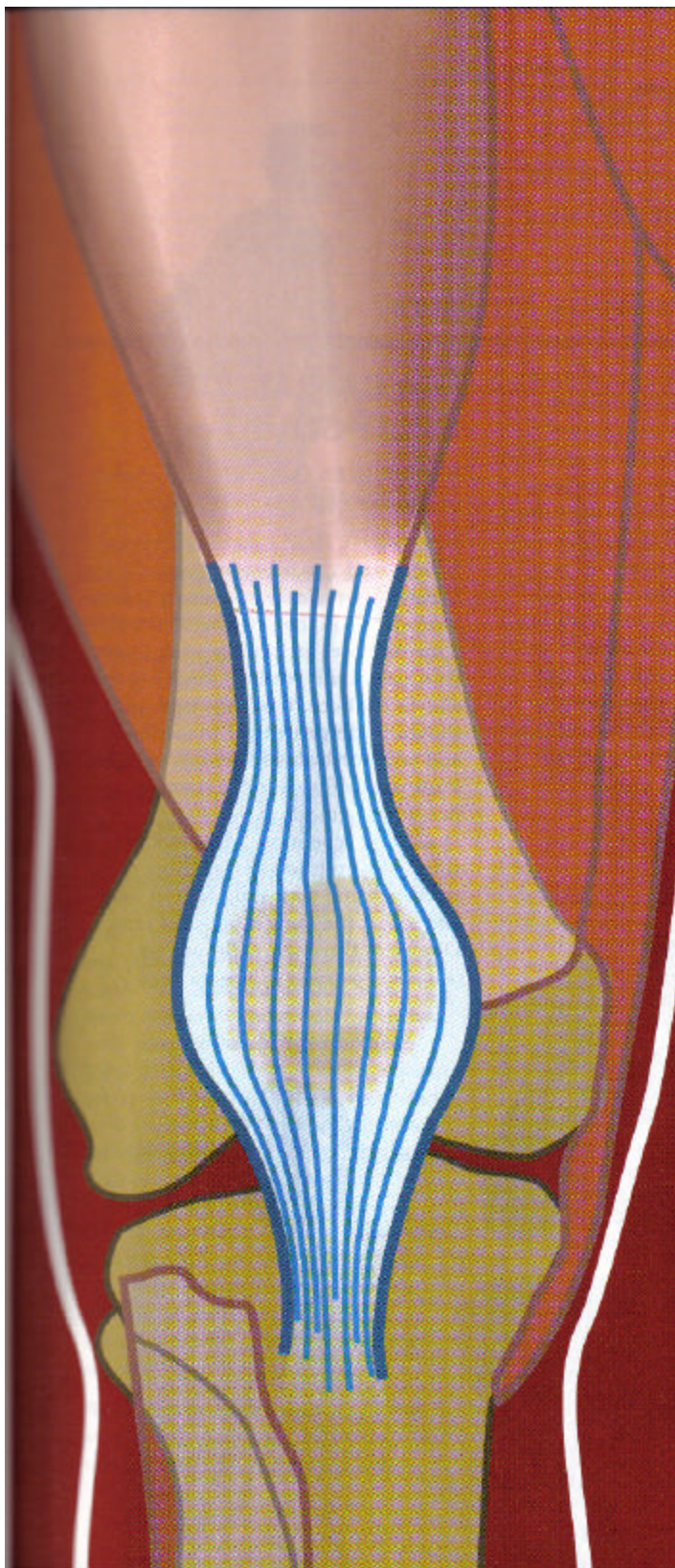
THE SUPRASPINATUS TENDON

Why it could blow: It's located in a narrow space between two bones at the top of the shoulder, where it can easily become compressed—causing bursitis or impingement—while performing over-the-head lifts, or playing sports like volleyball or basketball. In some cases, a compressed supraspinatus tendon can lead to calcific tendinitis, which is when calcium deposits develop where the tendon connects to the bone. Unfortunately, surgery is the only option in that case.

Symptoms: Sharp pain or restricted movement in your shoulder joint.

The fix: See a doctor; shoulders are fragile joints and easily misdiagnosed. And avoid weight-training on your shoulders if exercise aggravates them. Use perfect form (and lighter weight) when performing any over-the-head movement in the gym until your doctor says it's okay to go heavy.

Won't happen if you do this stretch: Standing upright in a doorway, face either wall and extend your arm straight out in front of you so that the palm of your hand rests on the doorframe. Lean inward and push against the doorframe, holding for 5 to 7 seconds. Do two sets of 10 to 15 repetitions. Repeat with your other arm.



PATELLAR TENDON

As thick as your finger, this tendon connects the large thigh muscle to the shinbone and allows you to extend your leg when running.

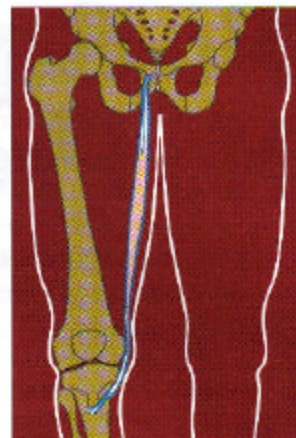
THE GRACILIS AND OTHER ADDUCTOR TENDONS

Problem: The adductor tendons are responsible for the inward motion of the thigh, which is critical to kicking and dribbling the ball in soccer. The adductors are also one of several different tendons running through and connected to the groin area. If one becomes strained, it can cause a chain reaction of problems among the rest.

Symptoms: Pain that starts in the pubic bone and radiates out into the groin area signals an inflammation of the gracilis tendon specifically, because it's connected only to the pubic bone. Chronic cases can lead to a torn gracilis tendon.

The fix: Avoid any movements that trigger the pain, and cross-train to other sports and exercises that don't aggravate it.

Won't happen if you do this stretch: Before working out, start in a standing position and spread your legs as far apart as possible. Repeat three times. Next, with your legs spread



GRACILIS TENDON

Because this is the only adductor tendon that crosses two joints, it's also the one most commonly injured.

apart, bend your right knee and shift your center of gravity to the right, so that your right knee is in line with the tip of your right foot. Your other leg should be extended, your upper body straight. Hold for a count of 10, switch sides. Do five repetitions.

—KIRSA KURZ AND CHRISTINA BILHEIMER

Tending to Your Tendons

DIAGNOSIS: Tendinitis

When irritation of a tendon leads to inflammation, and the area around the tendon is swollen and painful to the touch. In extreme cases, tendon tearing or degeneration can occur.

TREATMENT Icing the affected area for 20 to 25 minutes at a time (any longer can cause injury to the skin or nerves) every 4 to 6 hours (or as often as needed for pain and swelling) will usually do the trick, according to Sherwin Ho, M.D., associate professor of orthopaedic surgery at the University of Chicago and a spokesman for the American Academy of Orthopaedic Surgeons. "Think of it as an anti-inflammatory pain medication," says Dr. Ho, who also recommends taking ibuprofen in addition to icing. Avoiding any exercises that cause pain for a month or so isn't a bad idea, either. If the problem persists, see your doctor—and the sooner the better. The earlier the treatment, the less severe the consequences.

DIAGNOSIS: Torn tendon

Causes immediate pain and a weakening in the corresponding muscle. Swelling, bruising, and a perceptible bump in the muscle usually develop in the affected area.

TREATMENT You need to see your doctor. Unfortunately, the best way to repair a torn tendon is through surgery, which generally requires 6 to 8 weeks of recovery.