



GET LOOSE

Releasing your sorest, achiest spots isn't simply about stretching your muscles. In fact, it may not be about that at all. Meet fascia, the connective tissue weaving through your body that studies show is key to untangling tightness for good. **YOU STEP OUT OF BED** in the morning or stand up at the end of a long workday, and—*ooph*—there it is. Cranky stiffness. Yours may creep up only now and then—a twinge in the neck that rudely interrupts you as you tuck in your kid, or that pulling in your hip after a long car ride. Or maybe you feel a little achy around the clock.

Experts say we can melt this pain away—and even prevent it—by targeting a body part that's dropped in fitness conversations as much as foam rollers are in gyms: fascia, the layers of collagen-based connective tissue that run under the skin from head to toe. Like Spanx for our inner workings, the fascial system wraps around and in between muscles, organs, tendons, and ligaments—all the way down to the joints and bones—cinching the body together.

If you're racking your brain to recall the fascia lesson from high school biology, don't bother. This tissue largely gets left out of the curriculum, even in med school. "It is often scraped off cadavers in anatomy lab and thrown away, because it is thought that it just covers the good stuff like muscles, nerves, and blood vessels," says Thomas W. Findley, MD, a professor of physical medicine and rehabilitation at Rutgers New Jersey Medical School, in New Brunswick, and founder of the Fascia Research Congress, established in 2007 to spark dialogue and studies focused on the topic.

Scientists have a ways to go before they fully understand fascia's role in our health. Since it's linked to the body's numerous other systems—muscular, nervous, cardiovascular, digestive—it plays a role in each breath and step we take, and may impact everything from immunity to fat storage. Recent findings published by the American Association for Cancer Research also link connective tissue to cancer. "Every time we dig deeper, there's something else to uncover," says Findley.

Luckily for your creaky zones, much of the research thus far shines a light on how our fascia affects biomechanics, or body movement—and why it can feel natural and comfortable, strained, or even unbearable. Even when fascia isn't the root cause of your aches, it can complicate them—so getting familiar with how it works really pays off.

KNOW THE TROUBLEMAKERS

To the naked eye, fascia may look like one webby sheath of tissue, but it's actually made up of multiple layers. When it's healthy, each layer is separated by a slippery lubricant called hyaluronan, which allows the tissue and its neighboring muscles to glide over one another. But hyaluronan can become less fluid, even glue-like, and when it does, the result is a limited range of motion—something we experience as a tugging tightness. For some, fascia rigidity can also be accompanied by sharp, even debilitating pain, because the connective tissue is packed with nerve endings. Several factors can dry out hyaluronan, including:

LIMITED PHYSICAL ACTIVITY. Sitting at a desk all day for years, for example, can cause hyaluronan to become dehydrated and turn sticky. This doesn't occur overnight, but you may feel the effects after stretches of being sedentary, especially in the neck, back, and hips, common spots for fascia-related problems. Once the quality of hyaluronan is compromised, any bout of inertia—a long flight, or even a night in bed—can leave you feeling tight.

TOO MUCH PHYSICAL ACTIVITY. Overuse injuries caused by repetitive movement (training for a marathon, constantly bracing a phone between your ear and shoulder) can also make hyaluronan gum up, as can trauma like whiplash or a sprained ankle.

CHRONIC PAIN CONDITIONS. Arthritis (inflammation of the joints) and other factors that force you to tweak how you move can futz with fascia as well, per Findley. Putting more pressure on your right leg to compensate for an arthritic left knee, for instance, affects the whole body, especially the back, and can overwork and irritate the sensitive connective tissue.

Of course, arthritis or even a butt-kicking boot-camp class can cause aches and pains, too. To distinguish among the potential reasons for what you're feeling, keep these cues in mind: "With arthritis, the more you move, the worse the pain becomes. If the pain gets better with a little movement-which helps bring hydration back to the area-it's a fascia problem," says Antonio Stecco, MD, PhD, a research assistant professor of rehabilitation medicine at NYU Langone Health's Rusk Rehabilitation. Soreness from a tough workout also feels slightly different: You may experience muscle fatigue and weakness, but your range of motion won't be limited. If you're hobbling down the stairs, however, blame the f-word. Lactic acid produced by exercise lowers the pH in muscles, and hyaluronan reacts by becoming tackier. "It can become up to 25 percent more viscous," Stecco explains. As the lactic acid is metabolized, that stiffness should go away.

ENLIST THE HELPERS

To free up your fascia, follow the same Rx doctors give to protect your heart, brain, and bones: exercise. Aim for 10,000 daily steps, and take regular stretch breaks. And vary your workouts, suggests Jessa Zinn, the structural integrator (like a masseuse, but for fascia) at the Yinova Center, in New York City. Alternate brisk walks with swimming, for example.

Such movement can often mitigate existing woes (see Undo the Day, right). But if your pain interferes with your routine, or stems from a previous injury, consider seeing a structural integrator. A 2018 *Journal of Bodywork* & *Movement Therapies* study found that 102 people with lower-back issues who received fascial manipulation reported a significant reduction in pain, compared with those who had standard physical therapy. And a smaller, earlier study in the *European Journal of Physical and Rehabilitation Medicine* showed the practice to be more effective than traditional exercises at improving neck flexion (your ability to tuck your chin to your chest or tilt your head backward) in whiplash patients.

You may soon have another option, as well: Stecco's team has developed and is working with an injectable treatment that acts on hyaluronan to reduce stiffness. In the meantime, try these other strategies, and start moving through life with more ease.



Employ these athome tactics at night to help keep your fascia supple and prevent stiffness.

1. BEND BACKWARD

Any physical activity is good, but it's best to move against whatever's creating the tension. "If you work at a desk and then go straight to Spinning, you'll have more tightness," says Zinn. So mix in some yoga. Beginner poses like upward-facing dog and cat-cow counteract all-day hunching.

2. GO TUBULAR

Foam rolling may work the way massage does, says Zinn. While the research is limited, one International Journal of Sports Physical Therapy study found that two to five 30-second to oneminute sessions may increase range of motion in the hips, knees, and ankles. (It might feel excruciating at first, but trust us: The release is addictive.) Hips and alutes are good to target; here's how: Sit on a roller, and put your right hand on the floor behind you for support. Cross your right ankle over your left knee, shift your weight to the right, and roll for about 30 seconds, focusing on sensitive areas. Switch sides; repeat.

3. RAISE THE TEMP

Dehydrated hyaluronan turns liquid when heat is applied, says Stecco. Take a warm shower, or use a heat pack.