FITNESS & EXERCISE

Why Your Knees Hurt When You Start Running

Knee pain is common among runners, but its timing alone cannot tell you what is injured-or whether running is truly the cause.

The run ends, but the ache stays

You finish a run feeling pleased that you started. Then your knee begins to complain-on the stairs, getting out of a chair or the next time you lace up. The timing feels like a verdict: running did this. But timing is not a diagnosis, and "knee pain" covers several very different problems.

Running-related injuries, particularly overuse injuries, occur frequently. A 2021 systematic review found that the knee was among the locations accounting for the highest proportions of both new and existing running injuries. Across the studies, overall injury incidence averaged about 40 percent, although results varied widely.

That large number needs context. It covered musculoskeletal injuries throughout the body, not just sore knees in beginners. The review also warned that methodological problems limited how its epidemiological findings should be interpreted. It tells you that running injuries are common. It cannot tell you why your particular knee hurts.

This is the first useful distinction: pain appearing when you start running may be related to running, but the available evidence does not justify one universal explanation. Your knee contains bone, cartilage, ligaments and fluid, while muscles and tendons help it move. Trouble in any of those structures can produce pain or difficulty walking.

"Runner's knee" is only one possibility

Some knee problems do appear repeatedly in research on runners. In the 2021 review, patellofemoral pain syndrome accounted for 6.3 percent of injury incidence and 16.7 percent of injury prevalence. Iliotibial band syndrome accounted for 7.9 percent of injury prevalence. Those figures describe groups of runners, not odds that either condition explains your pain.

The same review found other common running injuries outside the knee, including medial tibial stress syndrome, plantar fasciitis, Achilles tendinopathy and ankle sprains. That matters because the place where discomfort is felt-and the structures involved-cannot safely be inferred from the fact that it appeared during a run.

Sudden injuries are another category. Ligament and tendon injuries can cause knee problems,

and an anterior cruciate ligament injury usually happens with a sudden twisting motion. That is a different story from an ache that gradually becomes noticeable, even though both may be described simply as "my knee hurts after running."

Pain is therefore a prompt to get more specific, not an invitation to choose the most familiar label. Where the pain sits, whether there was a twist, and whether the knee is swollen, stiff, unstable or harder to move are details a health professional can use. A search result cannot examine your joint.

Your knee pain may have arrived with running, but its timing is only the beginning of the answer.

Do not jump straight to worn-out cartilage

A sore knee can make running feel destructive, especially if you have heard that cartilage "wears away." Osteoarthritis does involve changes in cartilage and other joint tissues. It can cause pain, stiffness, swelling and difficulty moving the joint. The knees are among the joints it commonly affects.

But osteoarthritis is not the automatic explanation for pain that begins with running. It is more common in older adults, though younger people can develop it, particularly in previously injured joints. Risk also rises with repetitive joint stress or injury, obesity and family history. None of those facts allows you to diagnose it from post-run soreness alone.

Osteoarthritis pain may occur when moving the joint. Other clues can include stiffness after rest, swelling-particularly after heavy use-a feeling that the joint is loose or unstable, or reduced movement. A clinician may use your health history, a physical examination, X-rays and laboratory tests when evaluating osteoarthritis.

The underlying process is real: healthy cartilage helps bones glide over each other and absorbs movement's shock. In osteoarthritis, cartilage breaks down and wears away, which can allow underlying bones to rub together. Yet the mere fact that running preceded pain does not prove this process is happening in your knee.

Good care starts with your actual knee

For patellofemoral pain, a 2025 best-practice guide combined evidence from 65 high-quality randomized trials involving 3,796 participants with interviews of patients and clinical experts. Its starting point was not a generic running fix. It recommended understanding the person's risk factors, reasons for seeking care, most important symptoms and physical impairments.

The guide placed education and knee-targeted exercise therapy, with or without hip-targeted exercise, at the center of care. Supporting options-including prefabricated foot orthoses, manual therapy, movement or running retraining, and taping-were to be selected according to the individual's needs and preferences after a thorough assessment.

That does not mean any strengthening routine is the answer to any painful knee. Another 2024 systematic review found that certain strength-training methods may improve running economy in middle- and long-distance runners. But running economy is a measure of energy demand at a submaximal speed, not evidence that a program identifies or resolves an unexplained knee problem.

Supplements offer no clean shortcut if osteoarthritis is your worry. Research on glucosamine and chondroitin for knee osteoarthritis has produced inconsistent results and conflicting recommendations. The largest, highest-quality chondroitin studies generally have not shown an effect, and whether either supplement meaningfully changes symptoms or joint structure remains uncertain.

Make next week about clarity, not toughness

You do not need to prove that you can run through pain, and you do not need to declare running over forever. Start by refusing the false certainty that every new-runner ache is the same. A gradual ache, a sudden twist and a hot, swollen joint are not interchangeable stories.

The point where this stops being merely a lifestyle question is when pain interferes with ordinary movement, such as walking or getting out of a chair, or when you have questions about what is happening in the joint. Contact a health care provider for concerns about your health rather than using general information as a substitute for care.

A hot joint, red skin, or joint pain accompanied by a rash or fever deserves particular attention. The National Center for Complementary and Integrative Health notes that these features probably indicate a problem other than osteoarthritis. Do not use a runner's-knee label to explain them away.

For the next week, keep the goal modest: describe what happened accurately and take that description seriously. Notice whether there was a twist, whether swelling or stiffness is present, and whether everyday movement has changed. Your knee pain may have arrived with running, but its timing is only the beginning of the answer.

Where this comes from

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