

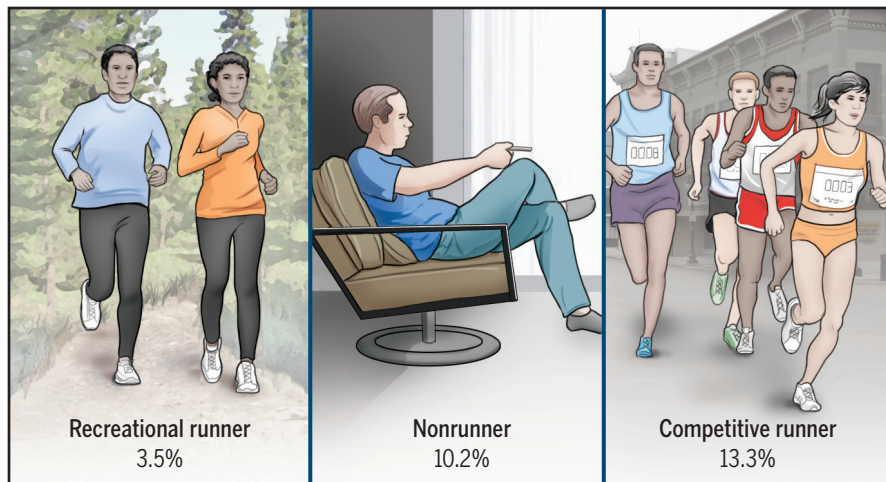
Running and Osteoarthritis

Does Recreational or Competitive Running Increase the Risk?

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You may have heard the phrase “exercise is medicine.” That’s because exercise, like running, is good for overall health and, specifically, our hearts, lungs, muscles, bones, and brains. Running can also help with weight loss, lower cholesterol levels, boost the immune system, fight depression, reduce stress, and improve mood. No wonder millions of people around the world exercise by running. However,

some people are concerned about the impact of running on long-term joint health. Does running lead to higher rates of arthritis in knees and hips? While many researchers find that running protects bone health, others are concerned that this exercise poses a high risk for age-related changes to hips and knees. A study published in the June 2017 issue of *JOSPT* suggests that the difference in these outcomes depends on the frequency and intensity of running.



BENEFITS OF RECREATIONAL RUNNING. Recreational running is not only good for your overall health, but also benefits your knees and hips—just 3.5% of these runners develop hip or knee arthritis. A sedentary lifestyle—not running—or competing as an elite runner increases the risk of hip or knee arthritis by 10.2% and 13.3%, respectively.

This *JOSPT* Perspectives for Patients is based on an article by Alentorn-Geli et al, titled “The Association of Recreational and Competitive Running With Hip and Knee Osteoarthritis: A Systematic Review and Meta-analysis” (*J Orthop Sports Phys Ther 2017;47(6):373-390. doi:10.2519/jospt.2017137*).

This Perspectives article was written by a team of *JOSPT*'s editorial board and staff. Deydre S. Teyhen, PT, PhD, Editor, and Jeanne Robertson, Illustrator.

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NEW INSIGHTS

The researchers reviewed 25 studies that included 125,810 people, and ultimately selected 17 studies with a total of 114,829 people. This study's authors found that only 3.5% of recreational runners had hip or knee arthritis; this was true for both male and female runners. Individuals in the studies who were sedentary and did not run had a higher rate (10.2%) of hip or knee arthritis. Most of the studies the researchers evaluated that showed an increased risk of arthritis from running focused on runners who were at the elite, ex-elite, or professional level. These professional or elite athletes or individuals who participated in international competition had the highest rate of knee or hip arthritis at 13.3%. The current study did not assess the impact of obesity, occupational workload, or prior injury on the future risk of hip and knee arthritis in runners.

PRACTICAL ADVICE

Recreational runners had less chance of developing knee and hip arthritis compared to nonrunners/sedentary individuals and competitive runners. The researchers concluded that running at a recreational level for many years—up to 15 years and possibly more—may be safely recommended as a general health exercise, and benefits hip and knee joint health. Their findings indicate that remaining sedentary and forgoing exercise increases your rate of knee and hip arthritis, compared with regular recreational running. However, high-volume and high-intensity training also may increase your risk for arthritis. Other researchers who found a link between high-volume and -intensity runners with knee and hip arthritis defined high-volume running as running more than 57 miles (92 km) per week. The benefits of running are numerous. This study allows you to be confident that recreational running will not harm, and may improve, your hip or knee joint health.



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