

Experts: Surprisingly Little Running Extends Lifespan

- By Runner's World

Running six miles per week appears to improve longevity by three to six years and reduces the risk of several chronic diseases, according to [a review of research](#) published in Mayo Clinic Proceedings.

A distinguished group of U.S.-based cardiologists, exercise physiologists, and epidemiologists collaborated on the review. It contains no new material or research, but summarizes results of the best, large-scale studies on runners. All of the studies included at least 500 runners and at least five years of follow-up.

Most of the paper's conclusions are unsurprising. Running improves weight management, blood pressure, and glucose control, and lowers the risk of some cancers, respiratory disease, stroke, benign prostatic hypertrophy, and cardiovascular and all-cause mortality.

Other conclusions are perhaps less expected.

"Paradoxically, and contrary to popular belief, running is associated with lower rates of osteoarthritis and need for hip replacement," lead author Chip Lavie, MD, said in [a video accompanying the report's publication](#).

Likewise, a continuing Stanford University study of longtime runners has shown that the older the runners get, the greater their advantage compared to non-runners of the same age on a disability index of common life activities. In other words, running doesn't cripple the musculoskeletal system, but makes it more robust.

The Mayo Clinic Proceedings article finds that it takes little running per week to reach the optimal benefit for improved longevity. The authors pin the numbers at about six miles per week, or about 52 minutes of running, achieved in just one or two workouts per week. This amount of running is associated with a lifespan three to six years longer than that of non-runners.

Higher mileage provides no more longevity benefit, according to the research summary. In fact, running more than 20 miles a week may erase some of the gain. "The low-dose runners had lower levels of fitness than higher-dose runners but appeared to get maximal protection against cardiovascular and all-cause mortality," Lavie told Runner's World by email.

This seeming paradox has previously been called the "excessive exercise hypothesis." Now the researchers are using a different term, "cardiotoxicity."

"We're not trying to scare anyone," said Lavie. "We just think athletes and their clinicians should be informed. The chance of a very serious risk is probably small."

The paper notes that 52 minutes of running per week is less than the U.S. government guidelines, which recommend 75 weekly minutes of vigorous activity like running.

According to the current guidelines, one minute of running is equivalent to two minutes of light exercise like walking. The new paper's authors find that the correct ratio is more like 1:3 or 1:4. That is, one minute of running is worth three to four minutes of walking. This is true because running is a very vigorous exercise, even at paces of 10:00 to 12:00 minutes per mile. In addition, some health researchers say, many walkers move along too slowly to get optimal benefits from walking.

In their conclusion, the authors write, "The overall benefits of running far outweigh the risk for most individuals, and are associated with considerable protection against chronic diseases and CVD [heart] and all-cause mortality."

The Mayo summary gained most of its data from 18 reports from the National Runners Health Study, as well as the National Running Aging Study, the Copenhagen City Heart Study, and the Aerobic Center Longitudinal Study's Running Report. The authors include exercise all-stars such as Steve Blair, PED, Tim Church, MD, PhD, James O'Keefe, MD, Duck-chul Lee, PhD, and Lavie.

About the Author

Runner's World

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