

Special Report

Running for Life: Even After 50, Making Tracks Makes Health Sense

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Study shows runners live longer, less likely to become disabled.

On Patriot's Day, Monday, April 20, some 25,000 runners will assemble at the starting line for the 113th Boston Marathon, the world's oldest annual marathon. Among them will be members of Tufts' 7th Annual President's Marathon Challenge team, which raises funds to support nutrition, medical and fitness research, education and outreach programs at the university; this year's goal is \$400,000. The largest known collegiate marathon program in the US, the Tufts team has been featured on PBS' "Nova," the popular science documentary program.

Since that 2007 telecast, which focused on the marathoners' training regimen, new research has emerged showing that vigorous exercise—such as running—is associated with living longer and in better health. That study focused on another running team, which, like the Tufts Marathon Challenge team, includes runners in middle age and even the "golden years."

Published in the Archives of Internal Medicine, the 21-year study by researchers at Stanford University in California showed that runners ages 50 to 72 experienced a 40% reduced risk of the disabilities associated with aging, had fewer incidences of cancer and Alzheimer's and just plain lived longer.

The study began in 1984, when 538 members of a nationwide running club for those 50 years old and over and 423 healthy controls—Stanford faculty and staff members ages 26 to 70—were recruited to complete annual questionnaires. All participants tracked their overall health, noting their exercise frequency and duration, their weight and their ability levels on eight specific activities: rising, dressing and grooming, hygiene, eating, walking, reach, hand grip and routine physical activities.

Both groups had little disability at the beginning of the study, all being relatively healthy. But the runners had significantly better scores at the starting line of the study. And as they racked up the miles and the years, the runners' health continued to outshine that of their non-running counterparts.

A total of 284 runners and 156 members of the control group completed the study through 21 years of follow-up. Significantly, all were 50 years old or older, bestowing a new wealth of information on—as well as a vote of confidence for—vigorous exercise for this age group.

Most of the subjects did some regular exercise, the researchers noted. But the runners had a much more vigorous lifestyle, reporting that they exercised as much as 200 minutes a week, compared to just 20 minutes for the non-runners.

And length of workouts paid big dividends for length of life: Only 15% of the runners had died near the end of the study, compared with 34% of the non-runners, the researchers reported.

Running Role Models

Some 25,000 runners are poised to pour across the starting line of the Boston Marathon this year, including members of the marathon team organized by John Hancock Financial, which is in its 24th year as principal sponsor of the marathon. Three recent marathoners— all over age 50—spoke with us, sharing aspects of their training regimens and some of their thoughts on running.

Terry Reagan, with Long Term Care Support Services at John Hancock, is 54 years old and has been running for 32 years, competing in more than 40 marathons in the past 10 years. He says the benefits he's gained through running bring him more enjoyment in life and at the dinner table.

"From running, I get to eat most anything I want to replace all the calories I use working out," Reagan says. "It also gives me a feeling of well-being and a comfortable level of fitness that increases my self confidence."

Matt Carpenter, 56 years old and also with John Hancock, has been running for 25 years for sport, health and enjoyment. He competed in his first marathon ever, the Boston Marathon, just last year and is training to run the Chicago Marathon next fall.

"I never understood just how exciting the experience in running Boston would alter my view of running going forward. I can't wait to finish another one and now I hope to do one a year," Carpenter says. "I believe that what happens at Boston is special and unique. The crowds, the course and other athletes all come together, injecting pure enthusiasm into each runner's spirit. It produces an incomparable brand of joy that all should experience before life's end. It literally changed my life forever."

Bill Chambers, 56, a regional vice-president with Manulife Investments, began running over 30 years ago as rehab from a near-fatal motorcycle accident. Today a motivational speaker, as well, and author of the book, *Go the Distance: Making Strides Towards Life Goals*, Chambers says that running for him has grown into a life passion. He is a member of the 50 States running club, the goal of which is to run a marathon in all 50 states. Chambers has run marathons in 32 states so far and competes in a marathon nearly every five weeks, completing 150 distance races including 53 marathons over the past 20 years. He's already run three races prior to this month's Boston Marathon.

"I am involved in a career that has high stress levels and constant travel, normally either flying or driving three to four days a week, so my run is a very healthy stress relief. I have many evenings on my own, so I run," Chambers says. "Marathon running is a great way to test not only your physical limits but your mental limits as well."

There are several possible reasons for the health and survival advantages found in runners, the researchers suggested. These might include increased cardiovascular fitness, improved aerobic capacity, better skeletal mass and muscle strength that decreased frailty, less inflammation and even improved response to vaccinations.

But you don't have to run a marathon to reap the health and longevity benefits of the older runners in the study. James Fries, MD, one of the Stanford researchers, says that any type of vigorous exercise will do the trick.

"Both common sense and background science support the idea that there is nothing magical about running, per se," Dr. Fries says. "It is the regular vigorous activity that is important."

Worried that a vigorous exercise like running will take a toll on your joints? Don't be, says Miriam E.

Nelson, PhD, director of Tufts' John Hancock Center for Physical Activity and Nutrition, a member of and adviser to the Marathon Challenge team.

"People think that running is bad for your joints, but as long as you train properly, you're not increasing the risk of joint problems," Nelson says. "I hear this dogma from a lot of recreational runners: 'I don't want to run when I get older because it'll harm my joints.' In fact, just the opposite is true."

In the Stanford University study, in fact, the runners had fewer injuries of all kinds, including to their knees.

Ready to leave the cheering throng of spectators and start running your own race? Whether you intend to work up to the Boston Marathon or just achieve better health through running your own "personal best" around your neighborhood, here are some pointers gleaned from the experts to help you build a successful running program that fits your stride, week by week:

Week 1: Establish a routine

Determine the best time for you to run every day—a time when you're least likely to make excuses. Getting into a routine is key because it helps curb the desire to put off running.

Join the Club!

Greater numbers of older Americans are exercising regularly than ever before. By 2010, a quarter of the US population will be older than 55. Officials with Running USA, a non-profit association founded to facilitate the growth of running organizations and help to promote the sport's health and fitness benefits, say that seniors represent the fastest-growing segment of runners. Since 2003, the number of road-race finishers in the 80 years old and above age bracket has risen 23%, as compared with all age groups.

Don't worry too much about distance in the beginning—just run, and do it consistently. Ideally, strive for covering three miles, five to six days a week, via running, walking or a combination of the two. Work up to your weekly goal gradually.

Run on whatever terrain is available— track, sidewalk or dirt road. When the weather is completely prohibitive to being outdoors, hop on the treadmill.

Remember to warm up, beginning at a slightly slower pace to prepare your body for the work ahead; be sure to do some stretching afterward.

Have a clearly defined goal, like losing weight or running a race. Running with a friend or running group can help keep you motivated.

Week 2: Building

If you've started out with a walk/run routine, aim to run more of your goal distance this week.

Many of the aches and pains you may be feeling can be chalked up to using new muscles. But chronic discomfort shouldn't be ignored! You may need to consult a running coach to work on your biomechanics, or perhaps see a podiatrist or orthopedist who works with athletes.

Pay attention to diet. All runners should eat more fresh fruits and vegetables. Be wary of over-doing it on the "carb-loading." If you're running three miles a day, you're burning only about 300 calories during the run— hardly meriting double portions of pasta!

Week 3: Progression

Time to step it up! During two runs this week, incorporate 20- to 30-second bursts of speed. Don't try for an all-out sprint; just push it a bit. This will help improve your speed, muscle strength and cardiovascular system to make longer runs easier. Leave yourself enough energy to complete the run.

Allow yourself time to recover after the interval; walk or jog slowly to bring down your heart rate. In

addition to speed work, increase the length of one weekend run by a mile or two.

Week 4 and beyond: Break it up!

It's time to give your muscles a break! Monday through Friday this week, decrease the amount and intensity of your runs—or ditch the running altogether and cross-train by bicycling, swimming or hiking. On the weekend, resume the running plan and increase your distance by a mile or two. Go back to this five-day “recovery week” every four weeks to allow the body to recuperate. As you become more fit, gradually increase the speed bouts to 45 seconds to a minute, and strive to decrease the recovery time in between. Increase your distance on weekends until you can run easily for an hour.

Looking down the road

At this point, you may want to reassess your running goals. Is it time to work with a running coach? Would you benefit from joining a group to help you begin training for a race?

Now that your routine is established— and you're seeing some positive results!—running will require less effort and be something you actually look forward to.

TO LEARN MORE: 113th annual Boston Marathon www.bostonmarathon.org. Tufts President's Marathon Challenge www.tuftsmarathonchallenge.com. “Nova” www.pbs.org/wgbh/nova/marathon. Archives of Internal Medicine, August 2008; abstract at www.archinte.ama-assn.org/cgi/content/abstract/168/15/1638. JohnHancock Center for Physical Activity and Nutrition www.jhcpan.nutrition.tufts.edu. Running USA www.runningusa.org

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