

Runners a marathon a net benefit for the body, experts say

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Historians say the first marathon runner was Philippides, who, in 490 B.C., ran 24.85 miles from the battlefield at Marathon with news of the Athenian army's victory over the Persians. He reached Athens, cried out, "Rejoice, we conquer," fell down and died.

Today we run marathons for fun. Are we crazy? Isn't running a marathon a giant insult to the human body and mind?

What does it do to us?

As counterintuitive as it seems to those who don't indulge, doctors, psychologists and runners agree that the effects of marathon running are mainly positive. It tones our bodies, calms our minds and builds up our all-important cardiovascular system.

"Running is good for you if you do it right," says Kevin Jacobs, Ph.D., exercise physiologist at University of Miami. "It builds your aerobic capacity, so your body is better able to use oxygen, which is good for you. It can improve blood lipids and blood glucose if they're abnormal. You sleep better. You feel better during the day."

Jake Zabara of Miami Beach, Fla., at 76, will be one of the oldest runners in Sunday's marathon and has been running them since he was 54. He says long-distance running reboots your mind, much like a computer. "For a week or so afterwards there's a certain serenity, a coming-to-peace-with yourself and the world."



Dr. Kristing Karlson, of the Dartmouth-Hitchcock Sport Medicine Clinic in New Hampshire, agrees. "Running is good for the heart and lungs because exercising any muscle makes it stronger," she says.

RUNNING CAVEATS

But running can become dangerous when water and salt intake are not properly balanced. Runners who drink too little during a race can become dehydrated, which, at the extreme, can shut down a runner's kidneys, often with fatal results, says Karlson.

"It can also cause heat exhaustion, when your body overheats because it can't sweat because it's lacking fluids. In this you can die because you cook your brain."

A lesser-known but equally potent danger is hyponatremia, when runners drink too much.

"It happens when runners drink more than they sweat during a race," she says. Symptoms include headache, nausea, vomiting, confusion, difficulty breathing, seizure and, rarely, death.

Women are more vulnerable than men, Karlson said, because, being slower runners, they are more tempted to grab a bottle of water at every aid station in the race, thus drinking too much.

Hyponatremia leads to salt depletion, which can lead to swelling in the brain, Karlson said. "And the brain can't swell; it runs out of space."

The best way to take in the right amount of water is to weigh yourself before and after a training run and see how much fluid you lose while running, Karlson said. If you drink about the same amount, you should be OK.



Women also are more vulnerable to eating too little before training and competitive runs.

"You're rewarded because lower weight means faster times," she said.
"But you can lose your menstrual cycle, and in the long run increase the risk of osteoporosis."

So when one sees sometimes waif-like marathon runners sweating and straining and vomiting and collapsing and sometimes even crawling across the finish line, the question again arises of why they would put themselves through such misery.

Runners are eager to explain.

"You get a buzz from it, almost an out-of-body experience," says Coral Gables, Fla., financial adviser Martin Norcini, 49, who has run 13 marathons.

"You get hooked," adds Norcini's wife, Susana, 44, who's running her first half-marathon Sunday. In training, she has developed a heel inflammation called plantar fasciitis, which hurts when she runs.

"My doctor says I shouldn't run," she says. "But I have to run."

Martin is the family's serious runner. His best time, in a New York City marathon, is three hours, 28 minutes. Now he has persuaded Susana and their daughter, Isabella, 16, to join him. They train together. They'll start together in the race, but then he will pull ahead; Susana will stop at the end of the Half Marathon, and Isabella will run as far as she can.

"I hated running before," Isabella says. "I just decided I had to do it. Now it's fun."



Natalie Newton, a Ph.D. sports psychologist from Atlanta who specializes in long-distance runners, puts her academic spin on it.

"Any aerobic exercise releases endorphins, which make you feel exhilarated. A side benefit is that they help dull pain. Unfortunately, a lot of sports figures injure themselves and don't realize it until later."

Endorphins, opiate-like hormones sometimes called "the body's natural pain relievers," are released by the pituitary gland during strenuous aerobic exercise.

Another way long-distance running is different from other sports, experts say, is that runners often peak into their 30s, ages when football and basketball players are taking their cortisone shots and hanging up cleats and sneakers.

"Running is more a mental challenge than a physical challenge," says Newton, the psychologist.

"The training involved and the duration of the event takes patience, and patience takes maturity. Younger runners want speed," says Jacobs, the physiologist.

GETTING STARTED

For a typical beginner, Jacobs recommends starting six months before the marathon. The routine: Warm up with jogging and jumping jacks, start with three-mile runs at a pace of 10 minutes per mile, follow through with post-run stretching. Aim for doing this three days a week.

Then build up in time and distance, going to five days a week, peaking with a 20-mile run at a pace of eight-minute miles three weeks before the marathon. At that point, taper back to about nine miles a day to let



the body recover before the 26.2-mile run.

After the marathon, the runner should rest for a week, then start back slowly, he says.

"The recovery time is significant after a long race," he says.

Another problem for the amateur runner is that the ideal physique for the sport is tall and thin, Jacobs says. A 350-pound football lineman will never win a marathon, no matter how hard he trains.

"How big your muscles are is less important than how good they are at consuming oxygen. It's part genetic, part training." he says.

And how much a runner can enjoy a grueling event like a marathon depends on why they're running in it:

Says Mederos: "We run to exert ourselves to the max, to push our bodies to the limit; we want the end result to be a reflection of pure guts."

Says Susana Norcini: "I enjoy the time with my family."

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