Prolonged Vigorous Exercise May Lead to Gut Damage

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High-intensity exercise offers a load of health benefits, such as a reduction in blood pressure and cholesterol levels. But more than two hours of strenuous activity may damage the gut, according to new findings published in the journal Alimentary Pharmacology and Therapeutics, reports WebMD.

For the study, researchers at Monash University in Australia assessed eight past studies to determine the relationship between exercise and gut injury, a condition dubbed exercise-induced gastrointestinal syndrome. Results showed that excessively long sessions of intense exercise harm the gut and impair its function.

Scientists determined that after two hours of nonstop strenuous exercise, individuals reach about 60 percent of their maximum level of intensity. If that threshold is exceeded, gut damage could follow. “The stress response of prolonged vigorous exercise shuts down gut function,” said Ricardo Costa, PhD, a senior researcher at the university and the study’s lead author. “The redistribution of blood flow away from the gut and toward working muscles creates gut cell injury that may lead to cell death, leaky gut and systemic immune responses due to intestinal bacteria entering general circulation.”

Costa added that other factors, such as heat stress and an individual’s predisposition to gut diseases or disorders, might also lead to gut injury during exercise. To avoid stomach problems, he suggested that folks stay hydrated throughout workouts, consume carbohydrates and protein before and after exercise, and work out within their comfort zones.

In general, the American Heart Association recommends at least 150 minutes of moderate exercise (brisk walking, water aerobics, ballroom dancing) or 75 minutes of vigorous exercise (running, swimming laps, cycling) per week. (Exercise is considered vigorous if it elevates the heart rate and causes hard, fast breathing.) But take breaks and keep your body moving no longer than two hours when working out intensely.

Additionally, researchers advised against the use of nonsteroidal anti-inflammatory drugs, such as ibuprofen (Advil, Motrin) or naproxen sodium (Aleve), before exercise. Scientists also said they found no proof that dietary supplements prevented or reduced exercise-related gut issues.

Costa confirmed there’s emerging evidence that a special diet called a low FODMAP (fermentable oligosaccharides, disaccharides, monosaccharides and polyols) diet may help reduce gastrointestinal problems. But he cautioned that individuals should consult with a dietitian familiar with the regimen before giving it a try.

Click here to learn about how you should fuel up before a workout.

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