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4-Second Workout for Your Triglycerides

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| The New Hork Times https://nyti.ms/35cKN60 | |
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| PHYS ED | |
| The 4-Second Workout | |
| Intense bursts of exercise throughout the day may have surprising metabolic benef | its. |
| By Gretchen Reynolds | |
| April 29, 2020 | |

heart disease, Type 2 diabetes and other metabolic disruptions. In particular, multiple hours of sitting can contribute to a later rise in the bloodstream of fatty acids, known as triglycerides, probably in part because muscles at rest produce less than contracting muscles do of a substance that breaks up triglycerides. High levels of triglycerides, in turn, are linked to an increased risk of heart disease and other metabolic problems.

but that single bouts of exercise are not lowering them:

Even when the young people interrupted another full day of sitting with a one-hour run, they continued to experience difficulties with fat metabolism the next day. The researchers speculated that the long hours of sitting might have changed the volunteers' physiologies in ways that rendered them "resistant" to the expected, beneficial metabolic effects of physical activity.

BUT....there is hope, 4 seconds at a time:

The scientists reasoned that if athletes needed two seconds of pedaling to reach maximum exertion, the rest of us probably would require, say, twice as much. So, they asked their volunteers to clamber on the bikes and sprint as hard as possible for four seconds, then stop pedaling, rest for 45 seconds, and sprint again, repeating that sequence five times.

The volunteers completed these brief interval sessions once every hour for eight hours, for a total of 160 seconds of actual exercise that day. Otherwise they sat, then returned the next day to down the unctuous breakfast shake.

Their metabolic responses differed this time, though, the researchers found. The volunteers arrived at the lab with lower blood levels of triglycerides to start with and burned more fat during the next six hours, so their triglycerides remained about 30 percent lower throughout the six hours of monitoring than on the morning after nonstop sitting.

The REAL LESSON HERE...the benefits of exercise are due to intensity, NOT duration. The more your heart rate fluctuates, the longer you'll burn fat after you stop exercising. That is why H.I.I.T. training (High-Intensity Interval Training) has become so popular & effective.

The more intense you exercise, the less time you need to exercise!

Stay well! - Dr. Arnold

<u>A May 6th article in the NY Times</u> showed that not only are our sedentary habits during COVID quarantine raising triglyceride levels in our blood:

Yes, you read that right...4 SECONDS.