How exercise turns back time in aging muscles

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Exercise is a potent way to reverse signs of aging, according to a new study covered by *Medical News Today* in this week's most popular article. So potent that one of the researchers we spoke with described exercise as "the most powerful drug we have."

So how does exercise deliver its benefits? In 2012, Dr. Shinya Yamanaka shared the Nobel Prize for Physiology or Medicine for discovering four transcription factors — known collectively as OKSM — that can trigger gene expression that reverses aging in mature cells. The latest research suggests that one of these factors, *Myc*, plays a critical role in reverting muscle fibers to a more youthful state, *but only in response to exercise*.

Interestingly, the study authors also note that drugs some people take for life extension, such as metformin and rapamycin, may interfere with the beneficial effects of exercise on muscle. Thus, it's important to remember that exercise is an irreplaceable part of healthy aging that a pill cannot replace.

MNT asked exercise physiologists for their tips on the best type of exercise for older adults. They recommended low impact, full-body workouts with a focus on lower body and core, as well as walking every day. In addition, people should perform strength training at least 2 days a week and mobility exercises, including stretching, every day. And it isn't only the muscles that need a regular workout — exercise has beneficial effects throughout the body, including the brain.

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