

Wellnews - Exercise: just what the doctor ordered

May 18, 2010

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San Diego Union Tribune

Want to stop cell suicide? Run a marathon.

Apoptosis is the scientific name for the phenomenon of natural programmed death of cells. It's a part of life, though obviously it can be problematic if cells die too soon, too often or in the wrong numbers.

Researchers at the University of Rome have found that strenuous exercise appears to arrest the process of apoptosis. The scientists examined blood samples taken from people before and after completing a marathon race.

"Apoptosis is a normal physiological function dependent on a variety of signals, many of which can be modulated by strenuous exercise," Italian researcher Gabriella Marfe said. "Here, we've shown for the first time that exercise modulates expression of the sirtuin family of proteins, which may be key regulators of training."

The researchers believe that sirtuin proteins are involved in the protective effects of exercise against cell death. "Sirtuins may play a crucial role of mediators/effectors in the maintenance of skeletal and cardiac muscle tissues as well as neurons," Marfe said, "thus explaining the synergic protective effects of physical exercise and calorie restriction for survival and aging."

Of course, the researchers cautioned against simply dashing out for a 26-mile run. Without appropriate training, conditioning and medical oversight, doing so could be tantamount to actually committing suicide — the whole body kind.