

New research shows runners can improve health and performance with less training

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The new 10-20-30 training concept can improve both a person's running performance and health, despite a significant reduction in the total amount of training. This is the conclusion of a study from University of Copenhagen researchers just published in the renowned scientific *Journal of Applied of Physiology*.

Over the course of seven weeks, [runners](#) were able to improve performance on a 1500-metre run by 23 seconds and almost by a minute on a 5-km run – and this despite a 50 per cent reduction in their total amount of [training](#). These are just some of the results from a research project involving 18 moderately trained runners following the 10-20-30 training concept developed by researchers from the Department of Exercise and Sport Sciences at the University of Copenhagen.

In addition to enhancing [running](#) performance, the runners from the project also had a significant decrease in blood pressure and a reduction in cholesterol in the blood.

"We were very surprised to see such an improvement in the health profile considering that the participants have been running for several years," says Professor Jens Bangsbo, Department of Exercise and Sport Sciences, who heads the project.

"The results show that the very intense training has a great potential for improving health status of already trained individuals," says Professor Bangsbo.

PhD student Thomas Gunnarsson adds that the emotional well-being of the participants also improved over the span of the project.

"We found a reduction in emotional stress when compared to control subjects continuing their normal training based on a recovery-stress questionnaire administered before and after the 7-week training period," explains Gunnarsson.

The 10-20-30 training concept

The 10-20-30 training concept consists of a 1-km warm-up at a low intensity followed by 3-4 blocks of 5 minutes running interspersed by 2 minutes of rest. Each block consists of 5 consecutive 1-minute intervals divided into 30, 20 and 10 seconds of running at a low, moderate and near maximal intensity, respectively.

30 minutes is all you need

According to Professor Bangsbo, the 10-20-30 training concept is easily adapted in a busy daily schedule as the time needed for training is low. A total of 20-30 minutes including warm-up is all that is needed. Since the 10-20-30 concept deals with relative speeds and includes low speed running and 2-minute rest periods, individuals with different fitness levels and training backgrounds can perform the 10-20-30 training together.

"The training was very inspiring. I could not wait to get out and run together with the others. Today, I am running much faster than I ever thought possible," says Katrine Dahl, one of the participants in the study.

Provided by University of Copenhagen

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