



## **A guide to interval training**

Cardiovascular exercise is a vital component of fitness training, and running is a great form of cardiovascular exercise. Plus, it requires relatively little equipment and can be performed almost anywhere.

The drawback? Traditional long distance running is incredibly time consuming and doesn't typically involve higher intensity sprints. Interval running offers a solution for individuals who are looking for large improvements in fitness but don't have the time for longer runs.

Interval running also appeals to those who prefer greater intensity in their workouts than the typical long, slow jog.

### **What is interval running?**

Interval running is a method of structuring your running workouts to allow increased intensity and greater aerobic improvement with less total time spent per workout. Interval running is an efficient way to maximize aerobic improvement while minimizing the overall time spent per workout.

How do you perform interval running?

With interval running, you'll perform a few minutes of light jogging to warm up. Afterward, the bulk of the workout revolves around brief periods of high intensity running, followed by periods of lower intensity jogging, walking, or even rest.

The high intensity pace for interval running exercise exceeds what you could physically sustain for 30 minutes, and the lower intensity pace allows you a brief recovery for the next high intensity pace.

Each interval period typically lasts 30-180 seconds at the high intensity pace, and 45-180 seconds at the lower intensity pace. In coaches' terms, these are known as repetitions and recoveries.

The specific duration of each repetition, including the ratio of high intensity to low intensity time in each repetition, varies based on your specific fitness goal and conditioning level. For example, at the club we will regularly schedule a 800m repetitions session. At first, runners may use a 2 or even 3 minute recovery after each 800m effort. As the year progresses and the sessions are repeated, runners can reduce the length of the recovery time and see if they can maintain their pace and form for each 800m. This has the effect of increasing training load as they progress to their overall training objective e.g. a specific race.

This ratio of high intensity to low intensity is called the work-rest ratio, and it's a key variable in designing interval running programs.

Overall, the structure of interval running programs allows far more time spent at higher intensities compared to a traditional running program.

The higher intensity results in greater improvements in your maximum aerobic capacity and works more muscle fibres overall compared to longer, slower runs.

Interval running allows you to target different energy systems in your body depending on your specific goals. The main sources of energy used in interval running are the aerobic and anaerobic energy systems. Both systems always contribute some energy, but the relative contribution of each depends on the specific interval used.

Aerobic improvements include increased endurance and improved efficiency in the cardiovascular system. Anaerobic improvements include greater maximal speed, increased muscle growth, and improved maximal power. Avoid doing maximal intensity intervals until you build up a baseline fitness level with aerobic intervals.

Without having to wear a heart rate monitor or perform calculations, the best way to track improvements is by tracking the time you take to cover each distance of the repetition eg 400m, 800m, 1k etc).

A lower resting heart rate is a sign that your aerobic system is becoming more efficient. Avoid doing more than one interval training session per week.