

## **OpenLearn course**

*Training for endurance in sport and fitness*

### **Narrator:**

If you are an athlete, a coach or an individual just interested in exercise, having a more in-depth understanding of what endurance is, and how it can be trained, will be advantageous because endurance is often a key factor in most sports and events.

Endurance, in relation to exercise, can be defined as the ability to tolerate or withstand the strain of extended exercise.

Therefore, endurance is important for middle to long distance events and team sports.

Although many physiological variables may contribute to endurance performance, the four key physiological determinants of endurance exercise are VO<sub>2</sub> max, Lactate threshold, Exercise economy and Anaerobic power/capacity.

VO<sub>2</sub> max is the maximum amount of oxygen that the body can use, and oxygen is needed to provide the body with a continual supply of energy.

Lactate threshold is the exercise intensity or speed at which the body produces more lactate than it can remove.

Through training, the body can become more efficient and achieve higher speeds or intensities before reaching the lactate threshold.

Exercise economy is the energetic cost of exercise. The less energy you need to run at a specific speed means you are more energy efficient.

Lastly, anaerobic power or capacity is a determinant of endurance performance. This is the ability to sustain a high level of force and can be measured through a power test such as a vertical jump test.

If you would like to find out more about these determinants of endurance performance and find out how to train them, you can complete this free OpenLearn course: [Training for endurance in sport and fitness](#).