

Volunteers wanted to improve health and fitness by exercising less

Posted on Thursday 24th February 2011

Researchers at the University of Birmingham's School of Sport and Exercise Sciences are calling for volunteers to take part in a study investigating the use of high intensity interval training (HIT) as a means to improve health and fitness.

The research is seeking to assess how different modes of exercise training can affect cardiovascular and metabolic health in an obese population and is proposing that exercise training of a shorter duration can be as effective as endurance training. This proposes an attractive solution for individuals who simply cannot find the time to exercise.

Lead researcher Sam Shepherd, from the School of Sport and Exercise Sciences commented:

"Although we all know exercise is good for us, the majority of people don't meet the recommended guidelines of 30-60 minutes per day and the most common reason for this is lack of time.

"Our previous research shows HIT, consisting of repeated 30-second bouts of intense exercise three times per week in just 20-minute sessions, elicits the same improvements in physical health and fitness, as performing 60 minutes of moderate exercise five times per week. Therefore, the total time commitment for exercise can be reduced from five hours to only one hour per week.

"We are now hoping to show the same beneficial effects in an obese population at risk of type 2-diabetes and cardiovascular disease. We hope that this time-efficient way of exercising can mean that even professionals with a hectic life can fit in health-promoting exercise and help challenge the ongoing rise of obesity and associated risk factors."

Participants will undergo four weeks of supervised exercise training in two groups: endurance exercise training and high intensity interval training. The first group will be required to complete five 40-60 minute cycle training sessions per week, whilst the second group will undertake repeated 30 second bouts of exercise, taking a total of 20 minutes, three times per week.

Before and after the training, a series of cardiovascular and metabolic tests will be carried out and participants will also receive exercise and nutritional advice and £50 to cover travel costs.

To participate or to find out more about the study, please contact Sam Shepherd via 0121 414 8746 or sos489@bham.ac.uk (<mailto:sos489@bham.ac.uk>).

Notes to Editors

Researchers are looking to recruit male participants aged between 18 and 35. Participants should be obese (BMI greater than 30) and healthy with no known metabolic disorder.

Exclusion criteria for participants:

- Participants must not apply if they are simultaneously taking part in another scientific or clinical study
- Participants must not apply if they are involved in regular exercise training

The study is being organised by scientists Sam Shepherd, Dr Chris Shaw and Professor Anton Wagenmakers at the University of Birmingham in collaboration with colleagues at the School of Cardiovascular and Respiratory Sciences.

Further media information:

Amy Cory, University of Birmingham Press Office, tel: 0121 414 6029 or

a.cory@bham.ac.uk (<mailto:a.cory@bham.ac.uk>)