Researchers need volunteers who are slim but sedentary

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Researchers from the University's School of Sport and Exercise Science are looking for male, healthy, sedentary but slim individuals aged between 25 and 60 to volunteer for a new study looking at the role our blood vessels play in keeping healthy levels of glucose in the blood stream.

This research has the potential to enhance our understanding of Type 2 Diabetes, where the mechanisms controlling the blood vessels go awry and blood sugar levels subsequently rise to unhealthy levels and lead to disease. The team need healthy sedentary slim individuals to compare alongside the results of athletes and overweight participants.

By looking at the different groups the research team hope to see how changes in weight or fitness alter these mechanisms.

Participants need to make two visits to the Queen Elizabeth University Hospital to complete the study. The first visit is brief and involves a preliminary assessment that includes height and weight measurements and a blood sample.

During the second visit you will be asked to drink a high sugar drink, whilst changes in the blood and the blood vessels in your arms and heart are measured. You will also be asked to wear a transparent plastic hood (called a ventilated hood) so the amount of oxygen you are consuming and carbon dioxide you are producing can be measured and used to calculate your energy expenditure.

Erika Cerri, who is conducting the research, explains: "If the mechanisms controlling the opening of the blood vessels are working properly, the sugar from the drink will reach the muscle via the blood and be taken up and stored. This storage process costs energy and would therefore be reflected by an increase in energy expenditure."

The second visit should take around 3 hours in total.

Erika adds: "Identifying how well the body can control the opening of blood vessels gives a way of measuring how effective different treatments are at improving this mechanism Improving the function of this process helps sugar get to the muscle for storage and keeps blood sugars to a healthy low level. In this way the progression to diabetes could potentially be avoided and reversed in populations at risk of this disease.

A financial reimbursement of £40 will be offered to cover travel expenses and inconvenience.

If you are interested in taking part please contact Erika Cerri at 0121 414 8745 or emc258@bham.ac.uk for more information.