Volunteers needed to test weighty matters

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Scientists from the University of Birmingham's medical school are looking for volunteers to take part in major study investigating the underlying causes of obesity and diabetes.

The study will look at the specific role naturally occurring enzymes in the liver may play in raising the risk of developing obesity or Type 2 Diabetes. Birmingham is one of the UK's leading obesity and diabetes research centres with particular expertise in the biology of obesity and exercise.

The study is already underway and the team are looking for both normal weight healthy volunteers and those with Type 2 diabetes who control their disease with diet or are newly diagnosed.

Dr Adeeba Ahmed who is leading the project comments: "We know there is a well established link between link between obesity and Type 2 Diabetes but the mechanism we are looking at may explain why this link exists. We're particularly interested in an enzyme called 11bHSD. This enzyme is present in liver and fat and can generate a hormone called cortisol which is strongly linked to the development of obesity and diabetes."

By volunteering for this study you will be helping us collect vital information about the process that happens when we develop Type 2 Diabetes.

Although the study does involve two visits to our labs, participants will receive compensation for the time they give up as well as getting some useful information about your body fat distribution, metabolism and liver and kidney function."

Volunteers on the study will be asked to make two separate visits to the state of the art Wellcome Trust Clinical Research Facility. The first visit, which involves an overnight stay, includes a series of tests to measure the body's ability to deal with sugar, as well as sophisticated scans of the abdomen and whole body to give an accurate measurement of the amount and distribution of your body fat.

Researchers will monitor chemical changes by taking a number of blood samples.

A second half day visit will involve blood tests after a very small dose of a steroid tablet to give an accurate picture of how well the liver activates steroids.

Adeeba adds: "By monitoring changes in the blood over a period of time we can get a much better understanding of how the body manages the whole process of handling sugar and steroids. The different tests allow us to get further detailed information about the role specific enzymes including 11βHSD play in this process.

Our work will provide the key research basis for the development of a new treatment for obesity and obesity-related diabetes – '11βHSD1 inhibitors', which would potentially have a huge impact in the management of these conditions, and in particular delay or prevent the progression to treatment with insulin."

To join the study contact: Adeeba Ahmed,Tel. 0121 414 2764,**a.ahmed.1@bham.ac.uk (mailto:a.ahmed.1@bham.ac.uk)**

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ENDS

Testing for volunteers includes:

- 'Glucose Tolerance Test' which test to assess metabolism, how well your body handles sugar and whether you have diabetes or "pre-diabetes"
- Scans of the abdomen and whole body will give you an accurate measurement of the amount and distribution of your body fat.
- Checks for cholesterol, kidney and liver function
- Advice on leading a healthier lifestyle and weight loss for volunteers who are overweight

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