

PRESS RELEASE

9th December 2011

Trust biomedical scientist develops test to identify the fat gene

A research biomedical scientist at The Dudley Group NHS Foundation Trust has developed a quick way of testing patients for a gene mutation that has been linked to obesity.

Patients attending the Trust's weight management clinics will find out within a couple of days if they have the FTO gene mutation – commonly known as the fat gene.

Senior Research Biomedical Scientist Jackie Smith won a prize for her paper submitted to the Biomedical Science Congress detailing the method she uses to identify the gene mutation.

Using a routine blood test, patients will be told if they have the particular gene mutation that has been linked to type 2 diabetes and increased body mass index.

"It's very easy to say to obese patients 'try a bit harder to lose weight' but if they have this gene mutation it is much more difficult to lose weight," says Jackie, Senior Research BMS at Russells Hall Hospital.

People with this gene mutation are on average 3 kilograms heavier than those without it.

"It's good news for patients because they will know why they are not losing weight. It's because they have the fat gene mutation and not because they are eating too much," she adds.

The fat gene identification test may be used in the near future as a routine test for clinically obese patients.

It has recently been shown that the effects of the gene can be counteracted with physical exercise.

"A person with fat gene would have to burn a stunning 900 kilocalories more per day to offset the possible weight gain," says Jackie.

"This amounts to three to four hours of moderate exercise every day."

Dr Mourad Labib, who commissioned Jackie to develop the gene identification method, hopes to test the frequency of the gene in patients who attend his weight management clinics.

"We will test only those patients who began having weight problems in childhood," said Dr Labib.

"This could indicate they may have the fat gene."

ENDS

For more information, please call Jackie Dietrich, Communications and Engagement Officer, The Dudley Group NHS Foundation Trust on (01384) 456111 extension 1423.