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DNA test 'could predict most effective diet'

Different diets work better for some people than others

A simple DNA test may predict whether someone is more likely to lose weight on a low fat or a low carbohydrate diet, say US researchers.

The results from the small preliminary study of 101 women showed those on the best diet for their genes lost two to three times more weight than the rest.
The results are being presented at an American Heart Association conference.
Experts said the findings tied in with previous studies, but further work should be carried out.

Cheek swab
The emerging field of "nutrigenomics" looks at how food interacts with genes.
It has long been known that people react to certain nutrients differently according to their genetic makeup.

Lactose intolerance, for example, is more common among Asians and Africans than of people of North European descent.

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>
> Prof Christine Williams, University of Reading

This study looked at how well people with different genes fared on different weight-loss diets.
The researchers, from Stanford University, analysed data from 101 white Caucasian women who provided DNA from a swab of their cheek cells.
The women had different diets for a year. The diets were very low carbohydrate, low carbohydrate/high protein, and low or very low fat.
The researchers divided the group into three genotypes which they described as low carbohydrate diet responsive, low fat diet responsive and a balanced diet responsive genotype.
They found that those on a diet which matched their genotype lost 2-3 times more weight over 12 months compared with those on the "wrong" diet.
The researchers said their findings were preliminary, and need much more confirmation before they could be used commercially.

'Intriguing'
British experts pointed out that the study had looked at a very small number of people and did not make clear what genes were involved.
Prof Christine Williams, from the University of Reading, said: "This is a very intriguing study - though very small."
She said it would be useful to get a better understanding of what genes were involved.
"It fits pretty well with some of our own studies which show that certain genotypes are more responsive than others to certain types of fats, eg diets high in omega-3 fatty acids," she added.