

In the news

Dieting 'keeps diabetes at bay'

A period of careful eating and regular exercise can stave off diabetes for a decade, a study suggests.

US researchers followed up nearly 3000 overweight people who had taken part in a 3-year diabetes prevention programme.

The group had initially been divided into three – assigned either to a diet and exercise programme, the diabetes drug metformin, or a placebo. The *Lancet* report notes it was the dieters who reaped the most benefit.

All three groups were given access to ongoing lifestyle coaching once the initial 3-year trial had ended.

That trial, carried out by the US-based Diabetes Prevention Program Research Group, had shown a diet aimed at achieving 7% weight loss, combined with half an hour of exercise 5 days a week, reduced the risk of developing type 2 diabetes by 58% compared with the placebo group.

The group on metformin, a drug which has been used to treat the condition since the 1950s, saw their risk decline by nearly a third.

Overweight men please step forward

Overweight men are wanted by researchers in Scotland aiming to better understand the connection between obesity and type 2 diabetes. Twenty overweight men with the condition and another 20 overweight men without are being sought for the study. It is hoped it could improve treatment and prevention of type 2 diabetes.

The study by the University of Aberdeen Rowett Institute of Nutrition and Health will assess if specific hormones produced by fat tissue are an issue. Dr Nigel Hoggard, who is leading the study, said, 'We know that obesity is strongly associated with the development of type 2 diabetes but we do not yet understand why some people who are overweight have the condition and others do not. Obesity is clearly associated with an increase in body fat and we believe the answer may lie in hormones produced by fat tissue in the body. Fat tissue produces a number of different hormones and our study will focus on a small number of these to determine whether they are at the root of the link between obesity and type 2 diabetes.'

Shellfish may raise diabetes risk

Eating white and oily fish regularly may provide protection against type 2 diabetes, but eating shellfish may have the opposite effect, a study from the UK hints.

The study team noted about 25% less risk type 2 diabetes among men and women who reported eating one or more, as opposed to fewer, servings of white or oily fish each week.

Unexpectedly, however, they found that men and women who ate similar amounts of shellfish -- primarily prawns, crab, and mussels -- had about 36% increased risk of developing type 2 diabetes.

But 'it may not be the shellfish per se which increased the risk for diabetes,' Dr Nita Forouhi, of Addenbrooke's Hospital, University of Cambridge, rather, the cooking and preparation methods used, for example, oils used when frying or butter- and mayonnaise-based sauces served with shellfish, may increase

cholesterol intake which, in turn, may raise diabetes risk.

Forouhi and colleagues assessed the weekly intake of shellfish plus white fish such as cod, haddock, sole, and halibut, or oily fish such as mackerel, kippers, tuna, and salmon, reported by 9801 men and 12 183 women. The study participants were 40 to 79 years old at the time and had no history of diabetes.

Over an average of 10 years, 725 of these men and women developed type 2 diabetes.

Both the lower risk linked with white and oily fish and the greater risk tied to shellfish intake remained when the investigators allowed for a range of diabetes risk factors including physical activity, obesity, alcohol use, and fruit and vegetable intake.

The investigators emphasise that the link between shellfish intake and diabetes risk requires further investigations in other populations. This observed link, Forouhi commented, 'does not imply that one is the cause of the other.'

The findings on white and oily fish "reinforce the public health message to consume fish regularly," the investigators conclude, while the shellfish findings should be studied further

Diabetes drug helps obese adults lose weight

Obese adults may shed more weight with the diabetes drug liraglutide than with the weight-loss drug orlistat, suggests a study in the *Lancet*.

The finding that liraglutide was superior to orlistat was 'unexpected,' said Dr Arne Astrup, from the University of Copenhagen, Denmark.

Until now, liraglutide has only been tested for its blood sugar-lowering abilities in people with type 2 diabetes. 'This is the first state-of-the-art trial to test its weight loss properties in obese adults without diabetes,' said Dr Astrup.

The biggest findings with liraglutide were the 'clear-cut' dose-response relationship with weight loss (the higher the dose, the greater the weight loss), the reduction in blood pressure, and the 'cure' of patients with pre-diabetes – that is, poor blood sugar control not yet bad enough to qualify as diabetes.

A cause of obesity in Nigeria?

One centuries-old tradition in parts of Cross River State, Nigeria is that of 'fattening rooms'. In contrast to many cultures, where slim is desirable, many communities in the Efik-speaking regions still regard a corpulent female figure alluring, and a sign of good health and prosperity. For this reason many young women, prior to marriage, are 'fattened' for matrimony – secluded in a room and fed copious amounts of rich traditional food.

While the prevalence of diagnosed diabetes in Nigeria is just over 2%, this tradition may have serious implications for the development of gestational diabetes; most of the girls who take part in this ritual are already at risk for obesity. There is scope and reason for research, in the form of cross-sectional studies, into the impact of the fattening rooms on increasing numbers of women in Nigeria with obesity-driven type 2 diabetes.