# Media Digest

## Childhood obesity may cause early onset of puberty

According to the results of a study recently published in the journal *Pediatrics* girls who are obese at 4 years old are significantly more likely to reach puberty before the age of 10.

This US-based study followed the development of 400 girls from 36 months up to the age of 12 years and aimed to establish a link between childhood obesity and the early onset of puberty.

The first author and Assistant Professor in Paediatric Endocrinology at the University of Michigan Joyce Lee said: 'This is a crucial study... we witnessed early onset puberty at nine among those who were obese by the age of four... there can be long-term implications for these children'.

British researchers are warning that this alarming trend will become prevalent in the UK as our own childhood obesity levels rise to match those of the US. David Haslam, Clinical Director of the National Obesity Forum agrees: 'We have to understand that we are catching up with the States — there's a very small window in which we can do something about this.'

The American researchers

recorded the weight and early signs of puberty through both observation and maternal interviews. Monitoring included the start of menstruation and breast development. They found that at the age of nine around 30 % of the subjects were overweight.

For every extra point on the BMI scores from 36 months the chances of early onset puberty rose by an alarming 44%.

According to the Department of Health one-fifth of all children in the UK below the age of 15 years will be clinically obese by the year 2010, which matches the level of childhood obesity in the US in 2000. Figures from the International Obesity Taskforce suggest that obesity among boys in England has already caught up with those in the US.

The Government's target of halting the rise in childhood obesity by the year 2010 looks set to be missed and pressure is mounting for the issue to be tackled.

According to the associate director of the Children's Health and Exercise Centre at the University of Exeter other studies suggest that it is not only obesity prompting puberty, but lack of exercise too.

Guardian, 5 March 2007

#### **Diabetes genes mapped out**

Researchers at Imperial College London, along with Canadian colleagues, say that they have mapped out the most important genes that put people at risk of type 2 diabetes.

These findings may be able to explain up to 70% of the genetics of the condition which offers hope that a genetic test could be developed.

The research team found 4 points on the gene map which are linked to the risk of diabetes in an individual.

After scanning some 400 000 mutations, the team identified a mutation that could possibly explain the cause of type 2 diabetes.

It was in a zinc transporter
- SLC30A8 - that the mutation
was found. This transporter is

involved in the regulation of insulin secretion and the researchers believe that it may be possible to treat some diabetes by mending this transporter.

'Our new findings mean that we can create a good genetic test to predict people's risk of developing this type of diabetes,' said Professor Phillipe Froguel, 'we can also use what we know about the specific genetic mutations associated with type 2 diabetes to develop better treatments.'

Dr lain Frame commenting on behalf on Diabetes UK echoed this by saying that 'the results of this research look promising... in the longer term they could perhaps lead to better treatments for people with the condition.'

BBC News, 11 February 2007

#### **Phantom pains banished by VR**

People with amputations who experience post-amputation pains have been trying a novel treatment to help them deal with the pain.

Five amputees were given virtual reality headsets to give them the illusion of seeing and moving the amputated limb.

The research team at the University of Manchester said that four out of the five people who tested the headsets reported an improvement. The team hope to include a larger number of people in future work.

Metro, 15 November 2006

### **Tighten the belt on slimming drugs**

Ministers have been told that a crackdown on slimming drugs which are easily obtainable via the Internet is urgently needed. These drugs, which can be potentially fatal, are used to suppress appetite. The United Nations' drug control agency has called for tighter controls to be implemented as they present a dangerous element in our 'slimming obsessed' society.

Various international conventions list 14 appetite suppressants which

are prescribed to treat obesity, narcolepsy and attention deficit disorder

Dr Philip Emafo of the International Narcotics Control Board said: 'Effective intervention by local authorities is a must, if this trend is to be reversed... there are probably adequate regulations in place but there needs to be the implementation of these regulations.'

Metro, 1 March 2007

### Burned-out workers may be at higher risk of developing diabetes

Researchers from Tel Aviv University, Israel, postulate that people who suffer from 'burnout' at their jobs may be prone to developing type 2 diabetes.

The study of 677 middle-aged workers found that those affected by burn-out were almost twice as likely to develop diabetes.

After removing the possible effects of blood pressure, the risk of developing type 2 diabetes was increased four-fold.

Dr Samule Melamed, the lead researcher on this study that was published in *Psychosomatic Medicine* said: 'Our findings suggest that the potential damage to health may be greater than suspected and may also include a risk of diabetes.'

It is known that stress can be a contributory factor in developing type 2 diabetes according to Natasha Marsland, a Care Adviser at Diabetes UK.

BBC News, 24 January 2007

### Are morbidly obese people eating more to qualify for free surgery?

Experts are claiming that obese people are consuming more food to ensure that they can receive free gastric bypass or banding surgery.

The British Obesity Surgery
Patients Association suggests that
it is Government guidelines that are
forcing people to eat more rather
than laziness or gluttony.

The Government guidelines recommend that people with a BMI > 35 kg/m² and a related health complication such as diabetes should be given the surgery. However, the costs involved mean that some PCTs have raised the threshold to a BMI > 45 kg/m².

London Lite, 24 January 2007

### **Healthy cereal bars? Think again!**

A recent survey of 20 cereal bars by the consumer watchdog *Which?* found that all had a high enough sugar content to qualify for a red warning logo under the Food Standards Agency's traffic-light labelling system.

More alarmingly over half of the bars also had a fat content that

would require the red light.

Neil Fowler, Editor of Which? said: 'These findings are worrying given the recent report that showed obesity in Britain is more prevalent than in many other European countries'. Most companies are now trying to reduce the fat levels.

The Times. 2 November 2006

### Mother's cells may repair tissue damage in the womb

Recent research involving both UK and US scientists suggests that mothers may be attempting to prevent their child from getting diabetes before they are even born.

For some years it has been known that transfer of stem cells from mother to child is tolerated, a phenomenon known as microchimerism, but it is as yet unclear whether these cells may be harmful to the recipient.

The study, published in Proceedings of the National Academy of Sciences, found unusually high levels of maternal DNA in the blood of around 20% of children with type 1 diabetes.

Some of these maternal cells had entered the child's pancreas and were fully-functioning there as  $\beta$ -cells.

One of the study groups' original theories was that diabetes may result due to the child losing tolerance to the 'genetically half foreign cells'.

Professor Edwin Gale of the University of Bristol put forward the suggestion that 'it is possible that the maternal cells may even be helping to regenerate damaged tissue in the pancreas.'

Dr Lee Nelson, a member of the research team, put forward the idea that stem cells from the mother could be harvested and then used to treat the child with diabetes. 'The child is probably tolerant to the mother's half-matched cells because the child acquired the cells during its life as a foetus while its immune system was still developing.'

BBC News, 23 January 2007

#### **MEDIA LITE**

### **Veterans scoff at healthier pieeating contest**

Gone are the days when meat and potato surrounded by pastry was the definition of a pie. We live in an age where pies are available in all flavours and this has been reflected in this years World Pie-Eating Championship.

For the first time in history vegetarians have been allowed to compete, as if this wasn't enough they will also be allowed to eat a cheese and onion pie rather than the traditional one.

Tony Callaghan, who holds the event at Harry's Bar, Wigan, Greater Manchester, says he has changed the rules in response to the Government's healthy eating campaign and what he described as 'relentless pressure' from the Vegetarian Society.

First prize has traditionally gone to the contestant who could

eat the highest number of pies in three minutes. However, in light of the Governments' attempts to eradicate obesity, the winner will be the man or woman who can devour a single pie the quickest.

Tony said 'I realise it may be controversial, but this is the way forward for pie-eating at this level [and] it will make for an exciting sporting spectacle, whilst also doffing its cap to Government guidelines on obesity.'

This has angered former competitors and champions alike, Mr Hindley, 48, a painter from Hindley, near Wigan, intends to lobby the organising committee on the changes. 'I'm not going to rest until I've got answers,' said the pie-munching painter.

Telegraph, 23 November 2006

#### Happiness is a blue pill

In Brazil, a scheme to make the elderly population of Novo Santo Antonio happier has been taken up by nearly 70 men over the age of 60.

The senescent Casanovas are being supplied with free samples of Viagra (Pfizer, Walton-on-the-Hill) in an attempt to make the older members of the community happier.

Joao de Souza Luz, the mayor of the town, said: 'Since we started distributing the stimulants, our elderly population changed. They're much happier.'

It would seem though that not all of the population are subject to the rise in happiness. 'Some of the men aren't seeking out their wives,' admitted the mayor.

To tackle the growing spate of extra-marital affairs that has arisen from the 'Happy Penis' scheme, the pills are now given to the wives of those who have signed up which will hopefully make it considerably harder for the men to cheat.

Metro, 20 November 2006

