Date Published: 25/06/2011

Word count Title: 4

Word count Body: 126

Sentence Count: 8

The Sun (England)

June 25, 2011 Saturday   
Edition 1;   
Ireland

Ditching calories '**reverses** diabetes'  
  
**SECTION:** NEWS; Pg. 22  
  
**LENGTH:** 126 words

DIABETES sufferers could **reverse** their condition by going on a 600 calorie-a-day **diet.**

A research team tracked 11 people with **Type 2 diabetes** who were put on a regime of liquid and non-starchy vegetables.

After just one week, pre-breakfast blood sugar levels had returned to normal among the group.

Over two months, insulin cell function in the pancreas increased towards normal and pancreatic fat decreased, as shown on MRI scans.

Study leader Prof Roy Taylor of Newcastle University said: "For many years, it has been assumed that **Type 2 diabetes** is a life sentence.

"It's chronic, it's progressive, people need more and more tablets, and eventually they need insulin. It's a downhill slope.

"However, we have been able to show that it is in fact reversible."

Date Published: 24/06/2011

Word count Title: 14

Word count Body: 545

Sentence Count: 26

The Daily Telegraph (London)

June 24, 2011 Friday   
Edition 1;   
National Edition

The 'cure' for **Type 2 diabetes:** a crash **diet** of 600 calories a day  
  
**BYLINE:** Stephen Adams  
  
**SECTION:** NEWS; Pg. 16  
  
**LENGTH:** 529 words

**TYPE 2 diabetes** can be reversed in as little as seven days by going on a crash **diet**, according to a scientist.

Adhering to a strict 600 calories a day causes fat levels in the pancreas to drop rapidly, restoring normal function, Prof Roy Taylor of Newcastle University found.

The discovery holds out the possibility that the 2.5million people with the condition in Britain could cure themselves, if they had the willpower.

Until recently, received medical wisdom was that **Type 2 diabetes** - the most common form of the disorder which usually develops later in life - was largely irreversible.

But the new small-scale study indicated that defeating it could be easier than commonly thought.

Prof Taylor asked 11 volunteers, all recently diagnosed, to go on what he admitted was an "extreme **diet**" of specially formulated drinks and non-starchy vegetables, for eight weeks.

After just a week, pre-breakfast blood sugar levels had returned to normal, suggesting a resumption of correct pancreas and liver function.

After eight weeks, all had managed to **reverse** their diabetes. Three months on, seven remained free of it.

Prof Taylor explained that too much fat "clogged up" the operation of the pancreas at a cellular level, preventing normal secretion of insulin which regulates blood sugar.

When this fat was removed - by way of the **diet** - normal function resumed.

He said: "This is a radical change in understanding **Type 2 diabetes**.

It will change how we can explain it to people newly diagnosed with the condition.

"While it has long been believed that someone with **Type 2 diabetes** will always have the disease, and that it will steadily get worse, we have shown that we can **reverse** the condition."

Gordon Parmley, 67, from Stocksfield in Northumberland, one of the volunteers, said: "At the end of the trial, I was told my insulin levels were normal and after six years, I no longer needed my diabetes tablets.

Still today, 18 months on, I don't take them.

It's astonishing really that a **diet** - hard as it was - could change my health so drastically."

The idea of the crash **diet** came from the observation that gastric bypass patients were often quickly relieved of Type 2 diabetics.

Many thought this was because surgery affected gut hormones which had a knock-on effect on the pancreas.

But Prof Taylor thought it might be because the surgery severely constrained what patients could eat. He set up the **diet** experiment to test his hypothesis.

He said special MRI scans showed the proportion of fat in volunteers' pancreases dropped during the eight weeks, from eight to six per cent.

"This study does not just show proof of principal, it shows proof of mechanism," he added.

He is presenting the findings to the American Diabetes Association conference in San Diego this weekend.

Dr Iain Frame, director of research at Diabetes UK, which supported the study, said: "It shows that **Type 2 diabetes** can be reversed, on a par with successful surgery without the side effects. However, this **diet** is not an easy fix."

Prof Taylor estimated that as few as five per cent of patients would be able to stick to the **diet**.

"However, if they did, it would save the NHS many millions of pounds," he said.

Date Published: 24/06/2011

Word count Title: 8

Word count Body: 575

Sentence Count: 29

DAILY MAIL (London)

June 24, 2011 Friday

COULD A 2-MONTH LOW-CALORIE **DIET** DEFEAT DIABETES?  
  
**BYLINE:** BY FIONA MACRAE SCIENCE CORRESPONDENT  
  
**LENGTH:** 554 words

The form of diabetes that blights the lives of millions of middle-aged Britons could be wiped out by cutting calories severely for just two months, research suggests.

After a small-scale trial, diabetics who consumed just 600 calories a day Ð the amount many people would eat at lunch alone Ð were able to throw away their tablets.

Eighteen months on, some are still free of **type 2 diabetes**, which is linked to obesity and usually occurs in middle age.

The Newcastle University researchers described the result as remarkable and said it proves that the condition that affects 2.5million Britons need not be a life sentence.

It also paves the way for new treatments for those who cannot stick to the drastic **diet**.

Professor Roy Taylor, the study's lead author, said: 'This is a radical change in our understanding of **type 2 diabetes**.

'While it has long been believed that the disease will steadily get worse, we have shown that we can **reverse** it.'

In **type 2 diabetes**, the pancreas does not make enough insulin Ð a hormone key in the conversion of sugar into energy Ð and the insulin that is made does not work properly.

The condition is often controlled initially with a stringent **diet** and exercise regime.

But many sufferers see their health worsen and eventually need tablets or insulin injections.

Diabetics are more likely to develop heart disease, blindness, kidney disease and nerve and circulatory damage, which at its worst can lead to amputations.

Reversing the condition could therefore improve long-term health and quality of life.

The researchers put 11 men and women with **type 2 diabetes** on a **diet** of 600 calories a day for eight weeks.

After just a week, some of their blood sugar readings had returned to normal, the journal Diabetologia reports.

After two months, fat levels in the pancreas had returned to normal and the organ was able to pump out insulin without any problems.

Some patients no longer needed tablets to control high blood pressure.

The researchers believe that a strict **diet** melts away fat clogging up the pancreas, allowing it to operate normally.

Three months after the end of the **diet**, seven of the 11 men and women were still diabetes-free.

Now, 18 months on, four of the five that have been in touch with the researchers still have no signs of diabetes.

Dr Iain Frame, of Diabetes UK, which funded the study, warned that no one should go on such a drastic **diet** without speaking to his or her doctor.

[f.macrae@dailymail.co.uk](mailto:f.macrae@dailymail.co.uk)

CURSE OF THE MIDDLE-AGED

IN diabetes, the amount of sugar in the blood is too high because the body lacks the insulin to use it properly.

Most of the 2.8million Britons with diabetes have the type 2 form in which the pancreas does not make not enough insulin.

While it is not known why the pancreas stops working properly, the latest research suggests that a coating of fat is at least partly to blame.

It is linked to obesity and usually occurs in middle age, although it is seen increasingly in children and teenagers as waistlines balloon.

In contrast, type 1 diabetes usually develops in childhood or adolescence and is caused by the body's immune system turning on the pancreas and destroying the insulin-producing cells.

People with this form of the condition cannot make any insulin at all and need to inject the hormone regularly.

Simply becoming slimmer would not repair the damage.

Date Published: 24/06/2011

Word count Title: 4

Word count Body: 746

Sentence Count: 37

The Express

June 24, 2011 Friday   
U.K. 1st Edition

WONDER CURE FOR DIABETES  
  
**BYLINE:** By Jo Willey Health Correspondent  
  
**SECTION:** NEWS; 01  
  
**LENGTH:** 728 words

Breakthrough is remarkable says professor

EATING an ultra low-calorie **diet** can cure **Type 2 diabetes** in just eight weeks, dramatic new research has shown.

Even people who have suffered from the condition for years found the drastic **diet** could jump-start their body's production of insulin.

The breakthrough is good news for the nearly 2.5million people in Britain who have this type of diabetes, which is caused by the pancreas not producing enough insulin to break down glucose in the blood.

It could revolutionise the treatment of what has always been seen as a lifelong problem.

Professor Roy Taylor, of Newcastle University, who led the research, said: "To have people free of diabetes after years with the condition is remarkable - and all because of an eight-week **diet**.

For many years it has been assumed that **Type 2 diabetes** is a life sentence.

It's chronic, it's progressive, people need more and more tablets, and eventually they need insulin. It's a downhill slope.

However, we have been able to show that it is in fact reversible.

"We have been able to put diabetes into **reverse** by a very low-calorie **diet** over a short period of time.

"What is really important and very new is the changes in the body that go along with this.

Specifically, the insulin-producing cells in the pancreas have gone to sleep in **Type 2 diabetes**, they are not really doing very much.

"As the level of fat in the pancreas has reduced, we have seen these insulin-producing cells come competely back to normal, and that is truly remarkable."

He added: "This represents a radical change in our understanding of the condition.

Insulin cells, if they are exposed to fat, don't work.

If they are protected from the fat they perform normally. It is quite possible that we may be able to devise medicines that block the effect of fat and allow normal function."

He warned patients, however, not to try the new wonder cure without close medical supervision.

Patients in the clinical trial had their food intake cut to just 600 calories a day for two months.

Professor Taylor said: "People ought to think about cutting down what they eat by perhaps a half.

On average, someone with a Body Mass Index of 30 will get diabetes.

If they got down to a BMI of 19-25, which is the healthy range, it would dramatically improve or even **reverse** their diabetes.

"A **diet** of 1,200 to 1,500 calories a day would achieve weight loss in most people."

Dr Iain Frame, director of research at Diabetes UK, also urged caution.

"We welcome the results of this research because it shows that **Type 2 diabetes** can be reversed, on a par with successful surgery without the side effects, " he said.

"However, this **diet** is not an easy fix and Diabetes UK strongly recommends that such a drastic **diet** should only be undertaken under medical supervision."

**Type 2 diabetes**, which can cause strokes, heart attacks and blindness, normally develops during middle age as a result of obesity or an unhealthy lifestyle.

The Type 1 version is genetic.

In the trial, 11 patients ate a "meal replacement" milkshake of 150 calories three times a day.

This was supplemented with three portions of non-starchy vegetables including cabbage, broccoli, peppers, tomatoes, cucumber and lettuce.

After just one week, their pre-breakfast blood sugar levels had returned to normal and an MRI scan revealed that the fat levels in the pancreas were also normal, down from around eight per cent to six per cent.

The pancreas also regained the normal ability to make insulin and as a result, blood sugar levels after meals steadily improved.

The volunteers returned to eating normally but received advice on portion size and healthy eating. Three months later, seven remained free of diabetes.

The research, published in the journal Diabetologia, suggests a dramatic drop in calories has a direct effect on reducing fat accumulated in the pancreas, which in turn prompts insulin cells to "wake up".

The findings are consistent with the belief that a lack of insulin secretion, which is vital for blood sugar control, is due to accumulation of fat in the liver and pancreas.

It has long been known that people who restrict their calorie intake and remain slim live longer than those who eat freely.

A low-calorie **diet** is also thought to slash the risk of developing cancer, heart disease and stroke, while staving off age-related degeneration of the brain and nervous system.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | http://www.lexisnexis.com:80/uk/nexis/images/s.gif | | http://www.lexisnexis.com:80/uk/nexis/images/s.gif | |  |  | | --- | --- | | http://www.lexisnexis.com:80/uk/nexis/images/s.gif | http://www.lexisnexis.com:80/uk/nexis/images/s.gif | | |

Date Published: 24/06/2011

Word count Title: 18

Word count Body: 949

Sentence Count: 43

The Guardian (London) - Final Edition

June 24, 2011 Friday

Front: Low-calorie **diet** offers hope of cure for **type 2 diabetes:** British study overturns assumptions about 'lifelong' condition  
  
**BYLINE:** Sarah Boseley Health editor  
  
**SECTION:** GUARDIAN HOME PAGES; Pg. 1  
  
**LENGTH:** 910 words

People who have had obesity-related **type 2 diabetes** for years have been cured, at least temporarily, by keeping to an extreme, low-calorie, **diet** for two months, scientists report today.

The discovery, reported by scientists at Newcastle University, overturns previous assumptions about **type 2 diabetes**, which was thought to be a lifelong illness.

In the UK about two and a half million people have been diagnosed with diabetes, the large majority with type 2, and numbers are rising across much of the world.

The condition has to be controlled with drugs and eventually insulin injections. It can cause blindness and end in foot amputation, as well as shortening life.

The results of the Newcastle investigation, though the study was small, demonstrated that full recovery was possible, not through drugs but through **diet**.

Eleven people with diabetes took part in the study, which was funded by Diabetes UK. They had to slash their food intake to just 600 calories a day for two months.

But three months later seven of the 11 were free of diabetes.

"To have people free of diabetes after years with the condition is remarkable - and all because of an eight-week **diet**," said Roy Taylor, professor at Newcastle University, who led the study.

"This is a radical change in understanding **type 2 diabetes**. It will change how we can explain it to people newly diagnosed with the condition.

While it has long been believed that someone with **type 2 diabetes** will always have the disease, and that it will steadily get worse, we have shown that we can **reverse** the condition."

**Type 2 diabetes**, which used to be known as adult onset, is caused by too much glucose in the blood.

It is strongly linked to obesity, unlike type 1, which usually develops in children whose bodies are unable to make the hormone insulin to convert glucose from food into energy.

They need daily insulin injections.

The research, presented today at the American Diabetes Association conference, shows that an extremely low-calorie **diet**, consisting of **diet** drinks and non-starchy vegetables, prompts the body to remove the fat clogging the pancreas and preventing it from making insulin.

The volunteers were closely supervised by a medical team and matched with the same number of volunteers with diabetes who did not get the special **diet**.

After just one week into the study, the pre-breakfast blood sugar levels of the study group had returned to normal.

And MRI scans showed that the fat levels in the pancreas had returned to normal.

The pancreas regained its ability to make insulin.

After the eight-week **diet** the volunteers returned to normal eating but had advice on healthy foods and portion size.

Ten of the group were retested and seven had stayed free of diabetes.

Taylor, the director of the Newcastle Magnetic Resonance Centre, had the idea for the study after it was shown that diabetes was reversed in people who had undergone stomach stapling or other forms of bariatric surgery because of obesity.

"What was remarkable was that the diabetes went away over the course of one week.

It was widely believed the operation itself had done something, (that) the hormones in the gut were thought to be the cause.

That is almost universally believed."

Taylor thought the massive drop in calorie intake after surgery could be responsible and to test this hypothesis set up the study, which included MRI scans of the pancreas to look at any changes in the fatty deposits.

"We believe this shows that **type 2 diabetes** is all about energy balance in the body," said Taylor.

"If you are eating more than you burn, then the excess is stored in the liver and pancreas as fat, which can lead to **type 2 diabetes** in some people.

What we need to examine further is why some people are more susceptible to developing diabetes than others."

He warned that only a minority of people, perhaps 5% or 10%, would be able to stick to the harsh **diet** necessary to get rid of diabetes.

But even that, he said, would dramatically improve the health of many people and save the NHS millions.

Iain Frame, director of research at Diabetes UK, said people should not embark on such a **diet** without a doctor's approval and help.

"We welcome the results of this research because it shows that **type 2 diabetes** can be reversed, on a par with successful surgery without the side effects.

"However, this **diet** is not an easy fix and Diabetes UK strongly recommends that such a drastic **diet** should only be undertaken under medical supervision.

Despite (it) being a very small trial, we look forward to future results, particularly to see whether the reversal remains long term."

Gordon Parmley, 67, of Stocksfield, Newcastle upon Tyne, a trial participant, said he first noticed something was wrong when his vision went "fuzzy" and he had trouble focusing while playing golf.

He had been on medication since being diagnosed with **type 2 diabetes** six years ago.

He said: "I thought I'd give (the trial) a go, as it might help me and other diabetics.

I came off my tablets and had three **diet** shakes a day and some salad or vegetables, but it was very, very, difficult and I'm not sure I'd have done it without the support of my wife, who went on a **diet** alongside me.

At first the hunger was quite severe and I had to distract myself.

But I lost an astounding amount of weight.

"At the end of the trial I was told my insulin levels were normal, and after six years I no longer needed my diabetes tablets.

Still today, 18 months on, I don't take them."

Date Published: 24/06/2011

Word count Title: 7

Word count Body: 343

Sentence Count: 14

The Independent (London)

June 24, 2011 Friday   
First Edition

Low-calorie **diet** may offer breakthrough for diabetes  
  
**BYLINE:** Richard Hall  
  
**SECTION:** NEWS; Pg. 16  
  
**LENGTH:** 337 words

PEOPLE WITH **Type 2 diabetes could reverse** their condition by sticking to a very low calorie **diet**, new research claims.

The study shows that by following the eight-week plan the body can produce its own insulin, crucial for diabetics.

Eleven people with diabetes followed a strict **diet** of liquid drinks and non-starchy vegetables and after just one week their blood sugar levels had returned to normal.

The breakthrough, made by experts at Newcastle University, suggests that a dramatic drop in calories reduces fat in the pancreas and is yet more evidence that fat is a primary cause of the disease.

The findings are consistent with the belief that a lack of insulin secretion - which is vital for blood sugar control - is due to accumulation of fat in the liver and pancreas.

Roy Taylor, of Newcastle University, said: "For many years, it has been assumed that **Type 2 diabetes** is a life sentence.

It's chronic, it's progressive, people need more and more tablets, and eventually they need insulin.

It's a downhill slope. However, we have been able to show that it is in fact reversible."

Professor Taylor, who hopes the research will be translated into future treatments, added: "This is a radical change in understanding **Type 2 diabetes**."

Some 2.5 million people in the UK are diagnosed with **Type 2 diabetes** and another 850,000 are thought to have the condition without knowing it.

Dr Iain Frame, director of research at Diabetes UK, said: "We welcome the results of this research because it shows that **Type 2 diabetes** can be reversed, on a par with successful surgery without the side effects.

However, this **diet** is not an easy fix and Diabetes UK strongly recommends that such a drastic **diet** should only be undertaken under medical supervision."

Keith Frayn, professor of human metabolism at the University of Oxford, said: "Professor Taylor's study offers great hope for many people with diabetes, although it must be said that not everyone will find it possible to stick to the extremely low calorie **diet** used in this study."

Date Published: 24/06/2011

Word count Title: 5

Word count Body: 192

Sentence Count: 9

Metro (UK)

June 24, 2011 Friday   
Edition 1;   
Ireland

Strict **diet** can **reverse** diabetes  
  
**BYLINE:** Fred Attewill  
  
**SECTION:** NEWS; Pg. 10  
  
**LENGTH:** 185 words

PEOPLE living with mild diabetes can cure themselves - if they are willing to following a very low-calorie **diet**.

Eating just 600 calories a day could be all it takes to kick-start the insulin cells, 'a remarkable' study has shown.

Experts testing their theory on a group of Type 2 diabetics found the blood sugar levels of every volunteer had returned to normal just seven days into an eightweek **diet**.

Over two months, insulin cell function in the pancreas improved and pancreatic fat decreased.

Three months later, after going back to normal eating, seven people out of the 11 remained free of **Type 2 diabetes**.

Study leader Prof Roy Taylor of Newcastle University said: 'For many years, it has been assumed that **Type 2 diabetes** is a life sentence.

'However, we have been able to show that it is in fact reversible.' Volunteers followed a **diet** of liquid drinks - containing 46.4 per cent carbohydrate, 32.5 per cent protein and 20.1 per cent fat, with vitamins and minerals - and non-starchy vegetables.

Between 160,000 and 180,000 people in Ireland suffer from **Type 2 diabetes**, which can lead to heart attack and stroke.

Date Published: 24/06/2011

Word count Title: 14

Word count Body: 344

Sentence Count: 18

The Mirror

June 24, 2011 Friday   
Eire Edition

DIABETES **DIET** 'CURE' OFFERS FRESH HOPE;   
PATIENTS BEAT CONDITION FOR GOOD IN EIGHT WEEKS  
  
**BYLINE:** STEPHEN WHITE  
  
**SECTION:** NEWS; Pg. 23  
  
**LENGTH:** 320 words

A CRASH **diet** could end the misery of **Type 2 diabetes** for Irish sufferers.

A special 600 calories-a-day eating plan cuts fat in the pancreas and prompts insulin cells to wake up after just eight weeks, research reveals today.

Trials at Newcastle University put 11 patients on a **diet** of liquid drinks, vitamins, minerals and vegetables.

After one week blood sugar levels were normal and three months later, after going back to usual eating, seven patients were still cured.

Trial member Gordon Parmley, 67, said: "I love playing golf but I was finding that when I was out on the course sometimes my vision would go fuzzy and I would have trouble focussing.

"It was after this that I was diagnosed with **Type 2 diabetes**.

That was about six years ago and from then on, I had to control the diabetes with a daily combination of tablets.

"I came off my tablets and had three **diet** shakes a day.

"The hunger was severe, but I lost an astounding amount of weight and, at the end of the trial, my insulin levels were normal.

"It's astonishing that a **diet** could change my health so drastically."

Professor Roy Taylor, who led the study, said: "For many years, it's been assumed **Type 2 diabetes** is a life sentence.

"People need more and more tablets, and eventually insulin. However, we have been able to show that it is in fact reversible.

"We have been able to put diabetes into **reverse** by a very low calorie **diet** over a short period of time.

"What is really important and very new is the changes in the body that go along with this."

Dietitian Gaynor Bussell, said: "Patients in my clinics are told if you lose weight you won't need tablets."

But she warned: "We'd never recommend 600 calories. Below 1,000 it becomes difficult to get enough nutrients, minerals, vitamins and fatty acids into the body."

Around 2.5 million people in Ireland and the UK are diagnosed with **Type 2 diabetes** and 850,000 more are thought to have it without realising.

Date Published: 24/06/2011

Word count Title: 3?

Word count Body: 87

Sentence Count: 4

The Times (London)

June 24, 2011 Friday   
Edition 2;   
National Edition

People with type 2 [...]  
  
**SECTION:** NEWS; Pg. 6  
  
**LENGTH:** 86 words

? People with **type 2 diabetes could reverse** their condition with a very low-calorie **diet**, say researchers at Newcastle University.

Professor Roy Taylor, who led the study, said that the "remarkable" findings showed an eight-week **diet** could prompt the body to produce its own insulin.

Just 600 calories a day could be enough to **reverse** **type 2 diabetes** in some patients.

The findings, in the journal Diabetologia, are consistent with the belief that a lack of insulin secretion is due to fat in the liver and pancreas.