



How well did we do in Wales?

Cambridge Weight Plan is a flexible series of diets based on formula foods presented as shakes, soups, bars and porridge that provide all the micronutrients and protein needed on a daily basis. Energy intake levels can be set anywhere from 415kcal/d (a very low-calorie diet) through 1200kcal/d to 1500kcal/d (a mixed formula food and conventional food diet) according to the needs and health status of the customer. In the UK Cambridge Weight Plan is provided by trained Cambridge Consultants.

Cambridge Weight Plan has a full programme of scientific research which has given solid evidence for the effectiveness of the programme in causing weight loss, weight maintenance and health benefits. We know the typical amounts of weight lost by participants in research trials, but what happens to people using Cambridge Weight Plan in real life? To answer this question we analysed the records of nearly one thousand residents in Wales who had used Cambridge Weight Plan to lose weight.

We found that 84% of them were women, two-thirds of whom had a starting body mass index of 30–39, 15% had a BMI of 40–49 and less than one per cent had a BMI over 50. One in five was overweight with a BMI between 25–29. The median length of a Cambridge Weight Plan programme was seven weeks.

One-third of women customers lost less than 5kg, about one third lost 5–9.9kg, one in six lost 10–14.9kg and one in six lost 15–29.9kg. Those who lost less than 5kg had a baseline BMI of 32 and an average age of 39 years while those who lost 20–39.9kg had a baseline BMI of 41 and an average age of 41.5 years. There was, however, no correlation between age and total weight loss. The average total weight loss was 9.9kg (the median weight loss was 7.3kg).

The amount of weight lost in the first week on a programme was 3.2kg. Weight loss in the first week when using a formula diet programme is high (most used a very low-calorie programme around 415–540kcal/d) reflecting some adjustment and loss of body fluids. The median rate of weight loss after the first week was 0.74kg/week. Older women tended to lose weight at lower rates than younger

women. The 31% who lost weight at a rate of less than 0.5kg/week had an average age of 41 years, while the 10% of customers who lost weight at a rate above 2kg/week had an average age of 33 years.

Among male customers, two thirds had baseline BMIs of 30–39, one in six had a BMI of 25–29 and one in six a BMI of 40 and above. They followed the programme for six weeks (median value) and lost 3.6kg in the first week (median value). The average total weight loss was 13.1kg (median: 9.5kg).

These findings are consistent with a general acceptance that weight loss on any programme is very variable according to the level of compliance, and that when using Cambridge Weight Plan programmes, compliant individuals can lose amounts of weight (around 10kg or more) that can make a real difference to health.

The original records and calculations were independently audited by Dr M. Capehorn, the Clinical Director of the National Obesity Forum who certified that data transfer and calculations were correctly presented.

Anthony R Leeds, Medical Director, Cambridge Weight Plan

'The typical customer was in her late 30s, had a baseline BMI of around 33 kg/m², used a VLCD programme for seven weeks and lost 7.3kg in total.'

Effective weight loss for those with high BMIs

Cambridge Weight Plan is increasingly asked to provide weight loss programmes for customers with a BMI of over 40. The programmes can be very beneficial for them and the higher energy requirements of these customers mean they don't need to use very low-calorie diets to achieve good weight loss results. The Plan takes into consideration any medical conditions affecting them and any medication they are using. It is also recommended that they consult their GP before starting a weight loss programme and medical supervision is recommended throughout. It is also advised that once their BMI is below 40 they have an additional medical review when they have lost 3 stone (20kg) in total.

Case Study: Andrew Round



Starting Weight	23st 10lbs (151kg)
Starting BMI	50.5
Height	5' 8" (1.73m)
Starting waist circumference	56" (1.42m)
Weight September 2013	16st 12lbs (107kg)
BMI September 2013	36.1
Current waist circumference	41.5" (105cm)
Total weight loss to date	6st 12lbs (44kg)

Nottingham postal worker, Andrew Round was keen to lose weight to improve his health. He suffers from Ventricular Tachycardia and has an internal defibrillator fitted to check for cardiac arrhythmias; this is monitored every three months via a Boston Scientific Monitor which sends an update to Andrew's specialist. Andrew has also had arthritis and one of his hips has been replaced.

Andrew's medications include Aspirin, Warfarin, Bisoprolol, Ramipril and Atorvastatin.

Andrew has lost 14.5" (37cm) from his waist circumference, 9.5" (24cm) from his hips, 10" (25cm) from his chest, more than 5" (13cm) from his arms and 3" (8cm) from his thighs.

Losing weight has transformed Andrew's way of life

Andrew had struggled with his weight throughout his adult life, occasionally managing to lose a little but always putting it back on again. One of Andrew's work colleagues recommended Cambridge Weight Plan and he began the Plan in July 2012 aged 59 after visiting a local Cambridge Consultant. Keen to achieve a slimmer physique to reduce the strain on his heart, Andrew began on Step 4 (1200kcal/day) and ate two Cambridge products and carefully selected foods for breakfast, lunch and dinner.

"I found being on the Plan quite easy during the week but struggled at weekends," said Andrew. "However, my Consultant, Christine was amazing — a real diamond. She educated me to choose healthy snacks and to increase my water intake, which really helped."

By October 2012, Andrew's weight had reduced to 20st 8lbs (131kg) and he then switched to Step 5 (1500kcal/day), which included one Cambridge product each day. Andrew gradually progressed to Step 6, the Cambridge weight maintenance programme, and has succeeded in radically changing his eating habits. Instead of consuming late night snacks of crisps and pork pies, Andrew is careful to eat smaller portions of healthy food now and in August 2013 he weighed 16st 12lbs (107kg).

"I found being on the Plan quite easy during the week but struggled at weekends," said Andrew. "However, my Consultant, Christine was amazing — a real diamond. She educated me to choose healthy snacks and to increase my water intake, which really helped."

Andrew's Cambridge Consultant, Christine Bentley, provided regular support, advice and encouragement throughout his weight loss journey. "I encouraged Andrew to compile a food diary," explained Christine. "Each week we studied the meals Andrew had eaten over the last seven days and discussed how he could adjust his diet and continue to lose weight. These changes have become a way of life for Andrew and he has learnt to lose weight while eating healthily. He used to make huge curries which he'd consume over two days; the same amount now lasts for three to five days."

Regular exercise has become part of Andrew's daily routine

Andrew used to need a crutch to help him walk to work. He had to have special permission to take a supervised shortcut through the postal machines where he works at Royal Mail because he couldn't walk the distance around the edge of the room.

"Before losing weight, I was unable to stand for long periods or exercise. I used to nod off in my chair nearly every day but now this hardly ever happens. Since losing weight, I can work longer hours and I am able to exercise much more than before," explained Andrew.

"I have so much more energy now. I swim four or five times a week and have gradually increased the amount I swim to 48 lengths which I can now do in 48 minutes. I also walk my dog each day for 30 minutes. I couldn't have done any of this before, as I used to have to stop constantly when I did any physical activity.

"Another advantage to losing weight is that I have more choice when I buy clothes now. When I was larger, I found it difficult to buy clothes from ordinary shops but now I can buy clothes off the peg and it's a lot cheaper."

Andrew's Consultant, Christine, says, "Andrew now has his food intake well under control while still being able to enjoy the occasional beer! He has been a joy to work with as he was so keen to change his diet and start exercising again. Andrew has changed his life for the better in many ways and the improvement in his ability to walk is wonderful to see."



Keep your waist to less than half your height

Dr Margaret Ashwell, Consultant Adviser to Cambridge Weight Plan, recently published an analysis of the height and waist circumference measurements of over 300,000 people, showing how the ratio of waist circumference to height predicts their risk of diabetes, high blood pressure and cardiovascular disease.

Our Medical Director, Professor Tony Leeds, asked Dr Ashwell why she thought that, despite this evidence, we still focus on using body mass index. Dr Ashwell explained that, unfortunately, almost all epidemiological evidence about obesity is based on BMI (body mass index) and there is reluctance, on the part of doctors and health planners, to move away from familiar measurements. "Our paper shows clearly that waist-to-height ratio correlates more closely with the risk of metabolic diseases than BMI. It also generated a very convenient fact that, when waist circumference is more than half the height, the risk of cardio-metabolic disease is significantly increased," said Dr Ashwell. "This translates into a simple public health message: keep your waist to less than half your height."

Professor Leeds asked Dr Ashwell what an individual should do if their waist-to-height ratio exceeds 0.5. "I would say ask to have your blood

pressure, blood lipids and glucose checked," she replied. "Public health planners should realise that using this new ratio will make better use of their resources because it will select the individuals most at risk." Asked if the figures applied to all ethnic groups, Dr Ashwell said that her large analysis was drawn from papers reporting work on many different ethnic groups. "Recently published papers from China, India and South America confirm that waist to height ratio is a particularly good screening tool in these growing populations where average height is still shorter than it is in Europe and the USA," she explained.

Ashwell M, Gunn P, Gibson S. Waist-to-height ratio is a better screening tool than waist circumference and BMI for adult cardio-metabolic risk factors: systematic review and meta-analysis. *Obesity Reviews* (2012) 13, 275–286.

Cai L, Liu A, Zhang Y, Wang P (2013) Waist-to-height ratio and cardiovascular risk factors among Chinese adults in Beijing. *PLoS ONE* 8(7): e69298. Doi: 10.1371/journal.pone.0069298.

Hot Press

Cambridge Weight Plan are pleased to announce that they are partners in a large multi-centre study of weight loss and weight maintenance in over 2000 people with pre-diabetes in Denmark, Holland, Spain, Finland, Bulgaria, New Zealand, Australia and the UK. The study, commencing in August 2013, is part of a large EU funded programme labelled 'PREVIEW' and managed from the University of Copenhagen.

Contact us . . .

If you would like to know more about Cambridge Weight Plan, please contact our Medical Department by emailing: medical@cambridgeweightplan.co.uk or calling: **01536 403344**

Solihull Trial highlights value of formula diets in NHS practice

In 2012 the Heart of England Solihull Community Trust identified the need for an alternative intervention to help with weight loss for patients who were not eligible for bariatric surgery or who had been unsuccessful in making appropriate lifestyle changes. Cambridge Pro800 was their product of choice and a trial was set up with the aim of achieving a 5–10% weight loss in 16 weeks.

Pro800 is an 800kcal/day nutritionally complete formula based meal replacement. It comes in single sachet servings of soups and shakes of between 202kcal and 209kcal. It can be used in weight loss, weight maintenance and education in portion control. Participants used Pro800 for 12 weeks and in the subsequent four weeks conventional food was gradually reintroduced. Support was available from psychologists and physiotherapists as necessary.

Key Points:

- 62% achieved or exceeded the therapeutic target of 5–10% weight loss in 16 weeks.
- Weight loss varied from 2.6–40kg over 16 weeks with an average of 15.6kg.
- Two super-obese men with sleep apnoea lost 24.5 and 31.8kg, an amount of weight loss known to improve sleep apnoea.
- The median rate of weight loss was 0.87kg/week (average 1kg/week).
- In those with a rate of weight loss up to 1kg/week, the median baseline BMI was 40.3 (the threshold for morbid obesity), while in those with a rate of weight loss over 1kg/week the median baseline was 51.4 (threshold for super obesity).

Professor Anthony Leeds, Medical Director of Cambridge Weight Plan commented: “The results of the Solihull trial are fascinating and confirm my view that liquid formula diets can be used effectively in NHS practice. 62% of the participants achieved or exceeded their therapeutic target. Five out of six participants for whom data is available maintained 78% of their weight loss at 12 months. There is always much variation in amounts of weight loss in real life where the routine stresses and strains cause variable compliance. I find in my NHS practice in London that patients who are highly motivated by debilitating disease often do very well because they feel better remarkably quickly. It was interesting that in the Solihull trial the two very obese men with sleep apnoea achieved very good weight losses. The number of participants in the Solihull trial is small compared to large clinical trials but it is desperately important to show that it is feasible to transfer this weight loss method into routine practice.”



The benefits

- Proven weight loss and long-term weight management with sustained health benefits
- Targets obesity
- Research supported
- Evidence-based, flexible programmes
- Long-term commitment, training and support from trained medical staff

Cambridge Pro800 products come in six flavours:

- Banana Shake
- Chocolate Shake
- Vanilla Shake
- Summer Fruits Shake
- Vegetable Soup
- Mushroom Soup

Every product comes in single flavour cartons containing 14 sachets each, with calorie value and nutritional data clearly stated on each carton.

Cambridge[®]
Pro800

TIPPING THE BALANCE ON OBESITY IN THE UK

Flexible energy intake and flexible combinations of formula and regular foods

Formula diets for primary and secondary care

Proven benefits in obstructive sleep apnoea and osteoarthritis

The solution for patients who need to lose weight before surgery

Improved vitamin D status and maintained bone health

Low drop-out rate



If you would like to know more about Cambridge Pro800, please contact Teresa Collier, Medical Sales Manager, on **07584 503527** or **01536 403344** extension **283**

e pro800@cambridge-manufacturing.co.uk

w cambridgepro800.co.uk