

# DIET DILEMMAS IN THE SPOTLIGHT

While there is general agreement on the need to halt the epidemic of obesity sweeping the globe, there is still much disagreement as to how to go about it. *Food Processing Intelligence* reports.

**The low-carb** revolution may have crumbled, but product innovation continues regardless, and a new era of carb-conscious consumers has developed on both sides of the Atlantic. While there may be fewer people following a strict low-carb diet, it seems consumers are becoming more carbohydrate aware. In response to the change in eating habits sweeping the UK and USA, food processors have had to react quickly to avoid the disastrous sales figures suffered by companies that were simply too slow to act.

Bread, potatoes, tinned fruit, pasta and beer are just five everyday items prohibited on low-carb diets. In response, food producers have launched low-carb versions of these foods:

- › In the USA, Sara Lee launched Delightful Bakery Breads, white and wheat breads with 9g of carbohydrate per slice compared with around 15g for traditional breads, at the end of 2004.
- › Researchers in North America have found that the Adora potato contains a third fewer carbohydrates and a quarter fewer calories than most standard varieties. This has delighted potato growers who were feeling the pinch following last year's low-carb obsession.
- › Del Monte launched Carb Clever in the USA in November 2004. This new line of canned fruit provides the same nutritional benefits as normal canned fruit, but has 50–70 per cent fewer carbohydrates.

- › The American Italian Pasta Company was quick to act, launching the first mainstream low-carb pasta in January 2004. The pasta – sold under the Mueller's umbrella in the USA – was launched in the UK in September 2004 under the Lensi Locarb brand. Unilever's Carb Options range also includes pasta and pasta sauces.
- › The low-carb beer market is less saturated than the other 'prohibited' categories. WDB Brand's Marston's Resolution was originally developed in the 1960s for diabetics, making it one of the first low-carb beers. Michelob Ultra was one of the first beers to be promoted with a focus on healthy lifestyles and low-carb levels in the UK and USA.

self-regulation from the food industry.

In the UK, the Public Health White Paper 'Choosing Health' was published in November 2004 and presented a range of steps to encourage a voluntary industry code in the UK. Suggestions included: jointly funding government campaigns against obesity, voluntary restrictions on advertising 'unhealthy' food to children, new nutrition labels to help busy shoppers make informed choices and an expansion of the five-a-day programme.

In the USA, the 2005 dietary guidelines were published in January, placing stronger emphasis on calorie consumption and increasing physical activity than ever before. With almost two-thirds of US adults overweight or obese, the guidelines were eagerly anticipated. The guidelines

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### OBESITY PREVENTION

Governments around the globe are increasing the pressure on food processors to encourage healthier eating. The UK government has set the food industry its toughest challenge yet: help crack down on obesity or face legislation in 2007. It is widely acknowledged that it is not the sole responsibility of manufacturers and retailers to prevent poor diet, but it's clear that governments now expect a degree of

make 41 recommendations, including the promotion of foods low in saturated fats, trans fats, cholesterol, added sugars, salt and alcohol.

Dr Susan Jebb, head of nutrition and health research at MRC Human Nutrition Research, believes there are real health benefits, irrespective of body weight, to be gained by adopting a diet low in saturated fats and rich in fruit and vegetables, and in taking regular exercise. She says:

'Evidence has shown that people who successfully lose weight and keep it off for more than a year are physically active and eat a low-fat diet with a high proportion of carbohydrates. They also eat smaller portions of energy-dense foods and more fruit and vegetables.' So, no mention of the Atkins, South Beach or GI diets.

Only time will tell whether any of the self-regulatory steps adopted by the food and drinks industry will actually make any difference to the shocking obesity statistics.

According to the UK Public Health White Paper, by 2023, the incidence of type II diabetes will increase 54 per cent from 1998 if obesity levels continue to rise at the same rate. Hypertension is predicted to increase by 28 per cent and heart attacks by 18 per cent. There is a growing need for obesity prevention in the UK, particularly for men, who are often ignored by the diet industry. Nearly two-thirds of UK men are obese or overweight.

### LOW-CARB FAD

Consumers have always loved a new diet, and the quirkier the better. And diets that actually work are commercial winners, however short-lived the results may be. It is the effectiveness of low-carb diets such as Atkins that has pushed them into the mainstream. The cutting out of carbohydrates to lose weight peaked dramatically around February 2004 in the USA and a few months later in the UK. Debate now rages as to the future of low-carb diets, at the same time as a significant number of new low-carb products are being launched and the multinationals are getting in on the act.

The recent launch of new low-carb products means that the consumer now has more choice than ever when it comes to healthy eating. But at the same time, more people are suffering from diet-related illnesses such as diabetes, and children are showing increasing signs of adult-onset diseases.

It would seem there is a degree of consumer confusion as to what really constitutes a good or bad diet. However, Charlie Powell of Sustain, the alliance for better farming, which is currently lobbying the UK parliament with its Children's Food Bill, says: 'Parents and kids are not stupid. They know exactly what junk food is and still eat it.'

### FOODS IN FOCUS

Nevertheless, there are contrasting opinions on what constitutes a healthy, balanced diet. The food pyramid, introduced in the USA in 1992, recommends a diet high in carbohydrates. Atkins is clearly set on restructuring the food pyramid. However, respected institutions such as the British Nutrition Foundation (BNF) and the Food Standards Agency (FSA), maintain that low-carb diets are not consistent with a healthy diet because they cut out a whole food group. Claire Williamson of the BNF says: 'Glucose-containing foods provide us with fibre, iron, calcium and a range of B vitamins. By cutting out these foods, we are reducing our intake of these important nutrients.'

However, not all nutritionists agree. Dr Sarah Brewer, a nutritionist and spokesperson for Atkins Nutritionals, says: '[Atkins] is a viable alternative to illnesses such as metabolic syndrome and type II diabetes. You should always see a doctor before embarking on a different diet, but Atkins can be very beneficial for a lot of people.'

The success of diets such as Atkins, South Beach and Sugar Busters is greatly boosted by their undeniable success stories. Williamson admits that: 'Some people do find that following this type of diet helps them to lose weight.'

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But despite the early weight loss experienced with diets such as Atkins, controversy has overshadowed much of the hype in the UK. An FSA spokesperson says: 'There are lots of diets that come in and out of fashion, and it is difficult to get hard evidence on each and every one and their particular effects, good or bad. While that makes it difficult to pass judgement explicitly on a specific diet regime, the FSA is clear that there is plenty of evidence that extreme diets of any kind are not a good idea in the long term.'

To counteract the impact of low-carb dieting, the Flour Advisory Board (FAB) launched Vitality, a healthy eating plan, in June 2004 with unprecedented success. More than 100,000 booklets, including a

seven-day meal planner, were printed and distributed around the UK by FAB and Sainsbury's supermarkets. The diet, created by sports nutritionist Anita Bean, is predominantly a low-fat weight-loss plan that also includes a weight maintenance guide.

Dr Tamara deGrassi, head of communications and a nutritionist at the FAB, says: 'It is a balanced, low-fat response to low-carb and quick-fix diets. It is very motivational to lose a stone on these diets but they are not sustainable.'

### SAFETY ISSUES

Dr deGrassi believes balanced eating plans, such as Vitality and WeightWatchers, offer alternatives to people who doubt the science behind low-carb diets as well as their safety. She says: 'The fact that Atkins himself died weighing 18st doesn't bode well. People are looking for safety and a diet that won't cause any damage.'

In 2003, the British Kidney Patient Association issued a warning about high-protein diets, and according to Dr deGrassi, research into high-protein diets also applies to diets such as Atkins and South Beach, which can cause kidney, bone and heart problems in the long term.

The FAB maintains that according to analysis of a number of peer-reviewed studies,

high-protein diets accelerate the rate at which kidney function declines. This effect is most frequently observed in subjects with pre-existing kidney disease, although it has also been observed in apparently healthy subjects. However Dr Sarah Brewer says: 'There is absolutely no evidence that the Atkins diet harms people with normal kidneys.'

### THE FUTURE OF LOW-CARB

Rob Ellert, chairman of Carbolite, the second largest low-carb food manufacturer in the USA and UK behind Atkins, believes low-carb will be added to the consumer health tick-list of low sugar, low salt, low calorie and low fat products.

Carbolite was first to market in the UK with its low-carb confectionery range, just in

time for the phenomenal sales peak in 2004. Ellert says: 'People will still follow a low-carb diet because it works, and it works quickly. The adverse criticism shakes some of the glitter off but doesn't stop people trying it.'

When discussing the future of the low-carb industry, Ellert talks about how big low-carb will be, not whether it will exist or not. He says: 'In three to four years' time there will be a low-carb category but with less noise surrounding it.' He strongly believes in the incorporation of low-carb into everyday eating patterns in much the same way as people currently restrict their sugar or fat.

Despite suggestions that low-carb interest is waning, product launches continue at the same rapid rate as in the last half of 2004. Kraft has teamed up with Dr Agatston, creator of the South Beach diet, to launch a range of products in the USA in time for spring 2005. The South Beach diet product range will include cereals, meal replacement and cereal bars, chilled sandwich wraps, frozen entrees and frozen pizza. Tesco launched its own range in January 2005 called Carb Control, which includes 40 own-label products as part of a 180-strong low-carb range across more than 260 stores. SlimFast also aims to reduce falling sales figures with the launch of 'low cal, low-carb' shakes, snack bars and soups in early 2005. Heinz launched its range called Carb Check in January 2005, on sale in Tesco stores nationwide. The range includes snacks, cereal bars and tomato ketchup. And Arla Foods is planning to launch a milk, under licence from Atkins Nutritionals in 2005, which will contain lower levels of lactose to reduce carbohydrate levels.

Ellert says: 'The low-carb proposition is a bit like diet coke. People don't drink it because they're on a diet, just to reduce sugar generally. This is how we will position Carbolite over time: as a product of choice for people opting for a low-carb lifestyle.'

### THE GI DIET

It seems that while many critics are jumping with delight at the negative press surrounding Atkins, there are signs that a new era of carb-consciousness is about to arrive. Many people have now heard of the glycemic index (GI), and the media are focusing on the GI diet as the next big thing. But what exactly is GI, and does it have a role in obesity prevention?

According to the University of Sydney, Australia: 'The GI is a measure of the power of foods (or more specifically the carbohydrate) to raise blood sugar (glucose) levels after being eaten.' Foods with a high GI contain rapidly digested carbohydrate, which produces a large, fast rise and fall in the level of blood glucose. Foods with a low GI score contain slowly digested carbohydrate, which produces a gradual, relatively low rise in the level of blood glucose. Glucose is the standard reference with a GI of 100.

The diet does have its opponents. The FAB conducted a literature review and found that there is no research to support claims that it helps prevent obesity. The FSA has commissioned a three-year medical study to consider the risks of GI, and many

## PEOPLE WILL START TO CONSIDER THE IMPACT OF FOODS ON BLOOD SUGAR LEVELS

industry experts believe we should wait for the results before making any unfounded claims about products.

While consumers may be aware of GI, it seems unlikely that the concept of the GI diet is fully understood by many, and according to an FSA spokesperson: 'Using GI as the only way of deciding whether foods or combinations of foods are healthy could be misleading. Not all foods with a high GI are necessarily unhealthy, similarly not all foods with a low GI are healthy. For example, watermelon, bread, rice and potatoes are high GI foods, while chocolate pudding has a low GI value. So consuming only foods with a low GI could result in a diet that is unbalanced and high in fat.'

### NEW TWIST

It seems consumers like to be told what they can and cannot eat, and this approach seems the most likely to succeed. More education as to what is high and low GI will be needed, and labelling is an obvious way of nurturing this awareness. However, the confusion looks set to continue with the introduction of the concept of glycemic load (GL), which is advocated as an alternative to GI by many dieticians. According to Mick Shaw, managing director of the GoodCarb Food Company, based in the UK: 'If you need one single number to tell you how a

food affects your blood sugar level it is GL. GI is great for nutritionists and people trying to put products together. It allows you to select the good carbs from the bad carbs, but it doesn't tell you how it is going to affect your blood sugar. The missing factor is the quantity of carbohydrates, and GL puts that back into the equation.'

GL diets are said to suppress appetite for longer, so there is more hope of people staying on the diet. This makes it a more worthwhile investment for manufacturers than some of the more difficult diets. The GoodCarb Food Company is one of the first to launch a food range based on GL in the UK. Commenting on the future of GI and GL in a market currently dominated by Atkins, Shaw says: 'Atkins is changing. I think it will

eventually change into a GL diet. They are already making reference to the blood glucose measurements on the website.

Ellert also believes there is a strong future for GI: 'Low-GI labelling could end up on our products – it is an option for the future as all Carbolite products are already low GI.' He added: 'Whether it's GI or the Zone diet, they will all have a low-carb factor, because you lose weight quicker than you do counting points or calories on diets like WeightWatchers.'

### LOW-CARB FUTURE

So, it seems that low-carb, in a different guise, could have a future role to play in obesity prevention on both sides of the Atlantic. Carb-consciousness is indeed set to continue, albeit at a slower, steadier rate than witnessed in 2004. The introduction of GI/GL diets will revive interest in low carb as an effective dieting method. People will start to consider the impact of foods on blood sugar levels, opt for low-GI/GL foods to avoid cravings, eat less and lose weight fast. New product launches from multinationals and smaller players will continue to hit the supermarket shelves. Low-carb products will develop in a multitude of forms and continue to hold their position in the food industry's drive to prevent obesity, alongside low-fat and low-calorie products. ■