

Dear Reader,

Hi-tech food diaries, ground-breaking genetic research and candid personal accounts of struggles with body weight - our winter newsletter has it all!

In this issue we update you on our culturally-sensitive web programme, Shape-Up Sister (p.1). We also tell you about two other helpful online resources - Nutracheck's online food diary (p.2) and Oxford University's Youth Health Talk website (p.3).

We update you on the latest developments from the world of weight loss drugs (p.3). And we look behind the headlines to find out exactly how important genes are in determining your weight (p.4,5).

We are pleased to have an interview with Dr Allan Geliebter (p.6), a world-renowned expert on binge eating. Dr Geliebter also tells us about Night Eating Syndrome - a 'new' disorder that's beginning to attract a lot of research attention.

Don't forget to check out Fresh Faces (p.7)

for the latest new additions to the growing Weight Concern team.

And finally we hope you are inspired by those using evidence-based techniques to make healthy lifestyle changes in our new section, Success Stories.

We wish you all a very happy holiday and an enjoyable read.



Dr Susan Carnell (Newsletter Editor)

SHAPE-UP SISTER! New online programme aims to help hundreds



Weight management has never been a case of 'one size fits all'. That's why, back in 2006, Weight Concern launched a programme with a difference: Shape-Up Sister is specially designed to help black women lose weight and live a more healthy lifestyle.

Why?

Cultural factors are a strong influence on every aspect of our lives - including weight and health. In focus groups our helpers told us that despite the wealth of information out there it's still difficult to find nutrition information on traditional foods. Obstacles like this can make it very tough to keep body weight in check.



Black women may benefit from culture-specific nutrition information

HOME
GETTING STARTED
HEALTHY EATING PLAN
KEEPING TO A REGULAR EATING PATTERN
TAKEAWAYS
LUNCH
SNACKS
CALORIE QUIZ
SPECIAL OCCASIONS
PORTION SIZES
WEIGHING FOOD

3 Step Healthy Eating Plan

Step 1
Keep to a regular eating pattern. This will help you to:

- Stop eating at the end of your meal
- Less likely to think about food in between meals
- You won't need to resort to high fat snacks in between meals. **More information** about keeping to a regular eating pattern

TOP TIP
Whether you eat 2 or 5 times a day, the important thing is to stick to a pattern and try to eat at roughly the same time every day

The Shape-Up Sister website combines nutrition info, healthy recipes, and simple tools to set lifestyle goals

How?

Since the programme's inception, Weight Concern staff have been working with colleagues at University College London to develop a culturally-specific interactive, online programme.

Nutrition information and healthy recipes are given for traditional foods, and simple goal-setting tools help people to translate the advice into action.

Evaluation

A trial to evaluate the programme started this year with five public sector employers in London. So far almost 200 women are using the website and

attending support meetings - not only to manage their weight, but also to improve their health and enjoyment of life.

Thank you!

We would like to thank all the women involved in Shape-Up Sister, and their employers too. We are grateful for funding from the Medical Research Council's National Prevention Research Initiative. By the end of 2009, we hope to publish results and make the programme and resources publicly available.

But in the meantime, if you'd like more information please contact Jessica Walker at shapeup.sister@gmail.com

THE WRITE WAY TO LOSE WEIGHT:

Keeping a food diary can double your weight loss

What did you eat and drink today? Can you remember what you had for lunch? And what about that chocolate bar you had with coffee?

Recalling every last morsel is far from easy, but it could be worth it: a new study* suggests that the simple act of writing down everything you eat and drink could help people control their intake and lose weight.

US researchers put 1700 volunteers on a moderate diet for 6 months, but asked half of them to keep a food diary. Those who didn't keep one lost only 9 lbs on average, but those who wrote everything down dropped 18 lbs - twice as much.

Diary secrets

Psychologists think that food diaries may work in a number of ways. First, they encourage the writer to pay more attention to the food they eat. They help people to evaluate the overall diet and notice things that can be changed or omitted.

They also help people to spot recurring patterns. For example, someone might notice they always eat an unhealthy snack at work in the afternoon, and they could avoid this by taking a healthy snack along with them.



Laptop weight loss: Chart your lifestyle changes on the go

Writing something down also makes it seem more concrete - so people may also start changing their diet to make it look better on the page!

Weight Concern newsletter readership survey...

We want to know what you think we're doing right, what you think could be improved, and the kind of news, reviews and features are of most interest and relevance to you.

So please visit

www.weightconcern.org.uk

to complete the survey - and stand a chance of winning a fabulous £50 Marks & Spencers voucher!

Updating the diary

When we think of diaries we often think of pens and paper. But there are now more modern ways to keep a record of what you're eating.

On the web you can find a growing number of food diary resources that can make it easier to keep track of what you eat - a quick search on Google came up with thousands of different sites in a range of formats.



Dieting online: Nutracheck's web-based food diary calculates your daily calorie intake

Some are printable diaries you can download, but others you can complete online. And while some food diaries are part of a weight management programme - such as those offered by Weight Watchers and Spark People - others are designed to stand alone as a weight loss tool.

We took a closer look at one food diary site, Nutracheck (www.nutracheck.co.uk). This personal online food diary gives access to a UK food database of over 40,000 products, so calories can be accurately calculated. It also enables users to keep track of how much physical activity they are doing.

To use the diary you just enter in what you ate - either at your computer or using your mobile phone.

Checks and balances

"Tools like this are an excellent way to start changing lifelong habits," said Weight Concern's Vicky Lawson.

"And a big advantage of online diaries is that if you are regular internet user they can easily accessed and are relatively cheap. The cost of using the Nutracheck site we looked at was £7.99 for 30 days and offered a 5 day free trial.

And other companies also offer some really good deals."

"Another nice feature of a number of sites is that they provide a support network through online members' forums - meaning that encouragement is on hand when it's needed."

Taking control

We contacted Nutracheck to find out how one of their members, Jane Kilpatrick, is getting on.

"I saw an article about how food diaries could help with weight loss," said Jane, who had been struggling with her weight for nearly 15 years. "And I can testify that it's true!"

"I describe it to my people by saying that I feel I have no 'off' button of my own, but the diary provides me with one! It is wonderful now to feel in control of food rather than food controlling me."

Different strokes

Using the internet to aid weight loss is certainly not for everyone. Not everyone has web access and some of us prefer to do things the traditional way. But people often complain that keeping a paper food record is challenging: it's hard to remember to take it with you and write everything down. For this reason online diaries are definitely of help to those who frequently use the web at work and at home.

The Nutracheck version is already being offered by two NHS Primary Care Trusts as a workplace initiative for staff. But the growing popularity of online diaries makes it possible for everyone to choose the diary system method that suits them the best.

Share your thoughts

If you've tried an online weight management service or food diary we'd love to hear how you got on. Please email v.lawson@weightconcern.org.uk and let us know your experiences and tips.

Source: Weight loss during the intensive intervention phase of the weight-loss maintenance trial. Hollis JF, Gullion CM et al. American Journal of Preventive Medicine.

Nutracheck website - www.nutracheck.co.uk

NEWS ROUND-UP

RIMONABANT SUSPENDED ACROSS EUROPE

The appetite-suppressing drug rimonabant has been suspended across Europe due to fears about psychiatric risk.

Around 97,000 overweight people in the UK have been prescribed the medication, also known as Accomplia.

But recent data has shown that people taking it are at twice the risk of

psychiatric disorders. In one large trial there were 5 suicides among those taking rimonabant, compared with only one among those taking a placebo.

Weight Concern supports this quick action on behalf of patient safety but sympathises with those who are finding the drug helpful and may now have to give it up.

RESEARCH ROUND-UP

NEW APPETITE-SUPPRESSANT MAY PRODUCE WEIGHT LOSS

Tesofensine, a drug targeting noradrenaline, dopamine and serotonin action in the brain, shows promise as a weight loss drug.

Obese patients in Copenhagen took the drug for a period of 6 months. At follow-up those taking a medium dose had lost 11.3 kg, while those taking placebo lost only 2.2 kg.

There were side effects however, including dry mouth, insomnia, nausea and diarrhea. Those on the highest dose also showed increased blood pressure.

Weight Concern supports research into new tools to help people make healthy lifestyle changes, but recognizes that centrally acting drugs make long-term monitoring of side effects essential.

Source: Effect of tesofensine on bodyweight loss, body composition, and quality of life in obese patients: a randomised, double-blind, placebo-controlled trial. Astrup A, Madsbad S, Breum L, Jensen TJ, Kroustrup JP, Larsen TM. *Lancet*, 2008, Oct 22.

RESEARCH ROUND-UP

NEW FAT-BURNING DRUG SHOWS PROMISE IN MICE

A new drug may be able to make the body burn fat even when energy levels are high, according to results released in November.

A French research team gave the drug SRT1720 - a chemical similar to one found in red wine - to mice for 10 weeks.

They found that, even on a high-fat diet, mice shifted into a 'fat-burning' mode normally reserved for low energy conditions. In addition they stopped gaining weight, and their diabetes risk was reduced.

Further research will test whether the drug may be help humans - not just rodents - manage their weight.

Source: Specific SIRT1 activation mimics low energy levels and protects against diet induced metabolic disorders by enhancing fat oxidation. Feige JN, Lagogue M et al. *Cell Metabolism*, 2008, 8(347-358).

SHARING THE WEIGHT: New website to help young people talk weight and health



OK Computer: The award-winning Youth Health Talk website has support from Radiohead frontman Thom Yorke

Weight management can be tough for young people, and feeling alone can make things seem worse.

A new not-for-profit website, www.youthhealthtalk.org, hopes to help out thousands of individuals - by providing a technologically-savvy forum focusing on weight and health.

A place to go

The award-winning Youth Health Talk site aims to:

- Give young people a chance to talk openly about their real life experiences of health, illness and lifestyles
- Provide reliable information and links to other websites, support groups and books
- Offer emotional and practical support for young people, helping them to realise that they are not alone
- Help health professionals, parents, carers, family and friends to understand young people's perspectives and therefore how to help.

The new section will include young people from all walks of life talking about a wide range of issues to do with weight and health, including: body image, size and shape, exercising, struggling with weight, food and eating, dieting, being told you're overweight, and losing and gaining weight.

A personal take...

Unlike other health information sites, www.youthhealthtalk.org features video, audio and written extracts from interviews with young people.

Sami, age 18, shared this tale with the online community:

"I have always had problems with my weight which fluctuated from overweight to obese throughout my life. I was never skinny like other girls at my school and I was picked on and bullied every day from my very first day, until I left aged 18.

"Day by day, my depression got worse and I started to self harm - I even tried to commit suicide - yet still no help was offered to me.

"I went to see the doctor, who told me I needed to lose weight because I was 'fat',

but never gave me any support or help. He didn't tell me how to eat healthily, or how much exercise I should be doing, and I began to lose all hope.

"But he eventually put me on anti-depressants and referred me to counselling where I slowly learnt to talk about and understand my feelings and to cope without self harming.

"I have learnt to like myself now, but I still have days where I look in the mirror and can't stand to look at my body. I find it hard to lose weight because I love cooking and I love food, and I don't know how to increase my exercise within my hectic lifestyle.

"I know that I am still classed as obese - I have a BMI of 39.2 - but I am comfortable with myself, and I know that I have the power to change myself if I want to. If I did, I would be doing it for myself, not for anyone else".

Sami has now taken this enthusiasm for healthy change into other parts of her life, and recently started a degree in an aspect of healthcare.

"I would like to help people make the changes in their lives that I had to fight to get help with," she says.

A call for help

Youth Health Talk are currently looking for more volunteers to help develop their new section on young people, weight and health, and would love to hear from:

- Young people aged 12-20
- Parents of 12-16 year olds
- Health care providers and other professionals who can facilitate contact with young people who might like to participate.

Participants can share their experiences in an interview (face-to-face, or via the telephone or internet), and can remain totally anonymous if they wish.

The researchers all have Criminal Records Bureau (CRB) clearance and the project has full approval from the University of Oxford ethics committee.

If you would like more information, please email [Krysia Carvin at info@youthhealthtalk.org](mailto:Krysia.Carvin@youthhealthtalk.org), call 01865 289328, or visit www.youthhealthtalk.org/comingsoon.

INHERITING OBESITY: Do our genes make us fat? by Susan Carnell

'Billy Bunter gene' makes children fat, say scientists. Obesity 'may be largely genetic'. Genes not poor diet blamed for most cases of childhood obesity. Genes to blame for childhood obesity.

British study finds genetic link to childhood obesity. 'Fat genes' a major cause of weight problems. Childhood obesity: Nature trumps nurture. Childhood obesity is 'in the genes'...



News-making: Media coverage of genes and obesity doesn't always give the whole picture

None of these are my own words. Instead they are headlines from February this year, inspired by the publication of a new study demonstrating the high heritability of childhood obesity.

By comparing the similarity in weight between identical twins (who share all their genes) and non-identical twins (who share only half), Professor Jane Wardle and her team found that 77% of the variation in children's BMI and waist circumference was down to genetic differences.

"Contrary to the widespread assumption that family environment is the key factor in determining weight gain, we found this was not the case," commented Professor Wardle, co-founder of Weight Concern.

"The study shows it is wrong to place all the blame for a child's excessive weight gain on parents; it is more likely to be due to the child's genetic susceptibility."

So how does this fit with what we already know about the causes of childhood obesity? What do the results mean for overweight children and their parents? And why do some people find the results so...unpalatable?

To learn more we spoke directly to the authors and asked them to counter the most common objections to their findings...

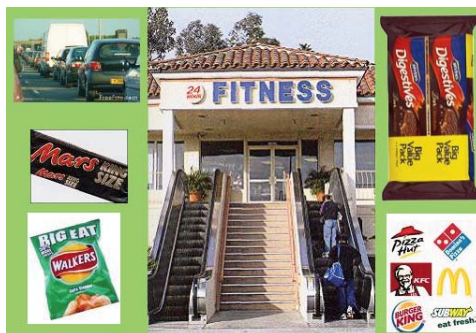
Objection 1: Genes haven't changed over the last few decades, but obesity rates have. So obesity can't be genetic.

Answer: It's true that the gene pool is unlikely to have altered dramatically in that short space of time. But this doesn't mean that obesity is not genetically influenced.

Environmental changes have made everyone fatter. But what our genes are doing - and have always done - is to determine how fat we get compared to other people.

In fact genes may be becoming more important than ever, because the differences between people seem to be increasing: the heaviest individuals are getting heavier and heavier while the leanest individuals stay persistently thin.

It's also worth remembering that we're not just talking about a defect in one gene which unavoidably leads to weight gain and obesity. In most people body weight is likely to be influenced by hundreds of common genes, each with a small but unique effect.



An obese environment: fast food and the car-driving culture make it hard to maintain a healthy weight

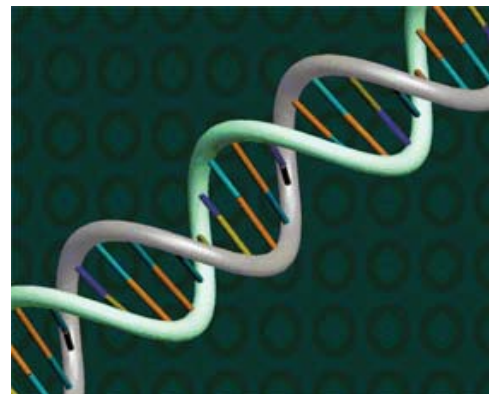
Objection 2: Obesity has increased because of societal factors like car-driving, TV-watching and access to cheap, tasty junkfood. It has nothing to do with genes.

Answer: All of these factors certainly influence obesity in adolescents and children, but what is interesting is why these changes have affected some people more than others.

The fact that obesity is highly genetic despite the pervasiveness of the 'obese' environment suggests that genes are somehow making some people more vulnerable to environmental forces. This could be because they make one person store fat or burn energy more than others.

But it could also be that genes are influencing our behaviour. For example genes could be making physical activity less appealing to some people, or harder for others to say no to the supersize portion.

In fact, new results suggest that FTO - the first common gene to be associated with obesity - could well be acting by increasing an individual's appetite for food (see Research Round-up 'Common obesity gene works via appetite').



Fat genes: If obesity is genetic does that really mean there is nothing we can do?

Objection 3: If obesity is in the genes then we can't do anything about it. Saying it's genetic gives overweight people an excuse to do nothing about their weight, and lets parents of obese children off the hook.

Answer: Of all the impressions it's easy to get from this kind of research, this might be the most damaging. However genes are working, it is always true that if you eat less and exercise more you will lose weight.

However, it may be harder for some than others, so these 'at risk' adults and children will need extra support.

This support needs to come at every level, right from the provision of helpful, targeted treatment, to broad societal changes encouraging physical activity and healthy eating - which have the potential to improve everyone's health.

As for parents, the last thing they should think is that there is nothing they can do. Parents of susceptible children should stop blaming themselves for things they think they might have 'done wrong', and accept that their child may find things more difficult than others.

But they can still help them enormously by creating a healthy home environment making healthy choices easier, and by equipping them with skills to resist forces from the obesity-promoting environment when they grow up. Parents could still prove to be our most powerful weapon against child obesity.



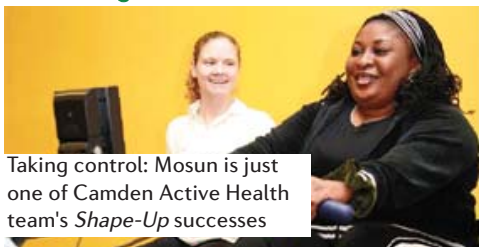
Parent power: Genes may be important but parents can still help

SUCCESS STORIES

Name: Mosun Nola

Support: Camden's active health team's *Shape-Up* programme

Goal weight: 12 stone



Taking control: Mosun is just one of Camden Active Health team's *Shape-Up* successes

Pick a diet and Camden resident Mosun Nola has tried it. In the 80s she ate cabbage soup, and in the nineties she joined thousands in cutting carbs with the Atkins diet.

"You name it, I've done it," she smiles.

But the mum of two may finally have found an approach that works, after joint problems led her to the door of her GP.

"Being overweight was putting pressure on my knees and causing me a lot of pain," says Mosun. "So my doctor suggested I try the *Shape-Up* programme."

Camden's Active Health team has been running Weight Concern's *Shape-Up* programme for a number of years now. "It isn't a diet and it's not just about weight loss," says Stephan from the Camden team. "We like it because it's all about living a healthier lifestyle."

Shape-Up is designed for anyone over 18 who is concerned about their health or weight and wants to find a life-long solution, not just a temporary fix.

Once people join Camden's *Shape-Up* programme they attend a session once a week for eight weeks. At each session participants get expert advice and support on how to eat more healthily and increase physical activity. Also important in these difficult times: all the sessions are free.

Mosun started *Shape-Up* three months ago. Since then she's lost seven pounds in weight and is determined to hit her ideal weight of 12 stone.

"One of the things *Shape-Up* has encouraged me to do is look at my portion sizes," says Mosun. "I have to keep a food diary and that has made me very honest about my eating habits." (See 'The write way to lose weight' for more info on food diaries).

With the help of a personal trainer, *Shape-Up* has even convinced the former exercise-hater back to the gym! "I was doing circuit training but I told my trainer I wasn't enjoying it," says Mosun. "So she encouraged me to go to aqua aerobics instead, which I really enjoy."

Mosun's *Shape-Up* success has not only been noticeable to her. "Even the other mums at the school gates have noticed I've lost weight over the summer," she says.

But the most important change has been the way she feels. "My breathing has improved - it's much easier now. And I can't believe I now go to the gym twice a week! Losing the extra weight has given me so much energy."

RESEARCH ROUND-UP

FAST EATING LINKED TO OVERWEIGHT

People who eat quickly are much more likely to be overweight, reported a Japanese research team in October.

The researchers asked 3,000 men and women about their eating habits and nearly half said they ate quickly.

Men who ate quickly were 84% more likely to be overweight, and women were over twice as likely. Those who additionally reported eating until they felt full were over 3 times as likely to be overweight.

Eating fast may not give the digestive system enough time to sense food intake and tell the brain to stop eating.

Slowing down may help appetite control, but studies to test this have yet to be conducted.

Source: The joint impact on being overweight of self reported behaviours of eating quickly and eating until full: cross sectional survey. Maruyama K, Sato S, Ohira T, Maeda K, Noda H, Kubota Y, Nishimura S, Kitamura A, Kiyama M, Okada T, Imano H, Nakamura M, Ishikawa Y, Kurokawa M, Sasaki S, Iso H. *British Medical Journal*, 2008, 337(a2002).

RESEARCH ROUND-UP

COMMON OBESITY GENE WORKS VIA APPETITE

The first common 'obesity gene' may be acting through effects on appetite, suggests a new study reported in September this year.

A research team led by Professor Jane Wardle (co-founder of Weight Concern) genotyped the 'FTO' gene in over 3000 children, and parents completed questionnaire measures about their appetite.

Children with two copies of the 'risky' version of the gene showed significantly less sensitivity to internal cues signaling that they should stop eating.

Furthermore, the association between FTO and weight was partly explained by FTO affecting appetite, which in turn impacted on weight.

These results help to explain why some people find it harder than others to manage their weight. See 'INHERITING OBESITY: Do our genes make us fat?' for further discussion.

Source: Obesity-associated genetic variation in FTO is associated with diminished satiety. Wardle J, Carnell S, Haworth CMA, Farooqi IS, O'Rahilly S & Plomin R. *Journal of Clinical Endocrinology & Metabolism*, 2008, 93(3640-3643).

RESEARCH ROUND-UP

CLUMSINESS LINKED TO LATER OBESITY

Children who show poor coordination at age 7 are more likely to be obese in adulthood, reported a large national study in August this year.

As part of the National Child Development Study, which began in the UK in 1958, children were assessed on hand control, coordination and clumsiness. Body mass index was measured when the participants were 33 years old, and there were higher rates of obesity among children with lower scores.

Commenting to the BBC, Weight Concern's Dr Ian Campbell said that poorly coordinated

children may be less active, but this was likely to be just one cause among many.

"While this helps us to understand the root causes, it doesn't change the fundamental problem that we are, as a nation, less active than we should be.

"All children, regardless of their natural abilities, should be given adequate encouragement and support to be physically active at school and at home."

Source: Physical control and coordination in childhood and adult obesity: Longitudinal Birth Cohort Study. Osika W, Montgomery SM; Longitudinal Birth Cohort Study. *British Medical Journal*, 2008, 337(a699). doi:10.1136/bmj.a699

SHAKING UP SHAPE-UP: Results from our facilitator training review

Weight Concern's *Shape-Up* programme has come a long way over the last decade.

Originally written as a self-help manual using behavioural and cognitive psychology techniques to improve weight and health, it now doubles as an 8 week group programme deliverable in a range of settings.

Measuring up

The growth of *Shape-Up* has been staggering - between 1997 and June 2008 Weight Concern has trained over 500 facilitators to deliver the programme.

But what we couldn't tell from these figures is how these new facilitators were implementing the programme. So in the summer we decided to conduct a training review to investigate how *Shape-Up* was being implemented across the UK.

Finding out

To do this we interviewed staff from 8 UK Primary Care Trusts, representing the varied settings - rural, urban, low and high socioeconomic status - that *Shape-Up* is implemented in.

The facilitators we interviewed found the psychological element useful and reported a range of good outcomes in participants - including modest weight loss, decreased waist

circumference, increased intake of fruit and vegetables, healthier diets, initiation of regular moderate activity, and increased knowledge about healthy eating.

They also made several useful suggestions, reporting that relaxed, confident, flexible, well-prepared facilitators who led by example were the most popular.

Interviewees came up with a range of creative ways to keep up attendance, including inviting guest speakers each week, giving out free gym passes, and giving out recipe books and hosting parties at the end of the programme.

They also stressed the importance of making sure participants understand what they are getting right from the beginning, and suggested a simplified version of the manual for some people.

Sprucing up!

We are really grateful for the feedback and will be using it to guide future improvements to *Shape-Up*.

We are also planning to set up a mailing list for *Shape-Up* facilitators to keep in touch.

If you would like to be on the list or see the facilitator training report in full please email us at enquiries@weightconcern.org.uk.

You are a clinical psychologist but you also conduct a lot of biological research. What do you think is more important in terms of tackling obesity - the biological or psychological approach?

I would say the biological approach. There's convincing evidence that parents' genes predict the degree of obesity in their offspring. And studies measuring genes and environment find that genetic factors overwhelm the environmental ones.

Down the road I also think biological treatments will also prove more helpful than psychological approaches. Drugs that reduce appetite are going to be most important - but we're probably about ten years away from having a really helpful drug on the market.

On the other hand I'm not saying that environmental interventions can't work. After all, you could also argue that the obesity epidemic is entirely down to environmental change.

You're very well known for your research in Binge Eating Disorder (BED). We would probably all say we binge occasionally, e.g. at Christmas or birthdays, but at what point does it become a disorder? And is it possible to treat it?

Well to be considered a disorder the behaviour has to cause stress, guilt and shame. And it has to be done on a regular basis - not just the holidays.

In contrast to obesity in general, psychological treatments of BED are promising, and headway has been made using Cognitive Behavioural Therapy (CBT). In fact CBT has been shown to be more effective than existing drugs used to treat BED - primarily anti-depressants. I don't mean to say that drugs won't one day be a better solution but for now therapy seems to do well.

Can you talk us through what happens during CBT for BED?

In CBT you try to figure out the triggers for binge eating. For some people it's stress - being yelled at by the boss, for example. But for others it's exposure to tempting foods - for example, passing a bakery.

Once one has an idea what the triggering stimuli are, there are different strategies to reduce either the impact of the stimuli, or exposure to them. We usually need about 15 to 20 sessions with the patient to tackle the problem.



A binge can be triggered by exposure to palatable foods

In recent years you have published several papers on a hormone called 'ghrelin'. Can you tell us a bit more about what is currently known about ghrelin in relation to obesity?

Ghrelin is a hormone which stimulates appetite and intake when directly administered.

In terms of everyday eating behaviour we're still not sure exactly what role ghrelin is playing. It's likely that it helps to initiate meals, but evidence is mixed.

ENGAGING WITH THE EXPERTS



Dr Allan Geliebter is an expert in eating disorders related to obesity. A clinical psychologist and a research scientist, he sees patients and conducts clinical studies at the New York Obesity Center, affiliated to Columbia University.

In a whistlestop tour of his diverse research interests, Dr Geliebter told us more about binge eating, night eating, and biological factors which may increase the risk of abnormal eating and obesity.

For example, we don't know whether ghrelin goes up first and then people eat - or if people are going to eat anyway and ghrelin is simply going up at the same time. It's very difficult to tease apart.

Now when it comes to obesity, you would think that ghrelin would be higher, explaining the greater intake. But the relationship is actually opposite to what you would expect: ghrelin is lower. What we think is that maybe ghrelin is down-regulated - either by obesity itself, or by overeating.

This suggests to me that there are other hormonal factors at work. It's very likely that we over the coming years we will continue to find many new hormones associated with appetite - and then think about how to piece them all together.

What is known about the relationship between ghrelin and binge eating?

Well we have also looked at that. We expected ghrelin would be higher, given the drive to overeat. But what we actually found was that ghrelin was lower than in normal weight individuals - and also than in obese people who didn't binge eat.

So once again we have this paradox. And again our interpretation is that it's the overeating - which is even more paramount in Binge Eating Disorder - that is causing ghrelin to go down.

Now for Binge Eating Disorder it may also be possible that the size of the stomach is contributing. We have shown that binge eaters have a much larger gastric capacity. And given that the stomach is the source of ghrelin, it's possible that the larger stomach mass is releasing some kind of signal to reduce the production of ghrelin.

You say that that binge eaters have bigger stomachs, but that seems pretty hard to know. How did you find that out? And how permanent is the change in stomach capacity?

We inserted a balloon into the stomach and gradually filled it. Then we looked at ratings of discomfort, fullness, etc, and measured pressure from inside the stomach.

Using the subjective measures of discomfort, together with more objective measures based on pressure-volume relationships we found that gastric capacity was bigger.

And not just bigger than normal-weight people - but also bigger than those who are obese but do not binge.

In terms of the permanence of the change, we haven't looked at this in binge eaters. But we did in obese people after a very low calorie diet. One month afterwards we found a 30% reduction in stomach capacity. So I think it is definitely changeable to some degree.

We've talked about binge eating as one possible route to obesity, but many people are obese and not all of them are binge eaters. How common is binge eating among obese people? And how do you think the non-bingers are becoming obese?

Of obese people seeking treatment, about 30% show binge eating behaviour. But the numbers are smaller if you look at the general population - probably about 5%.

Other people could be getting obese through what people have referred to as a 'grazing' or 'nibbling' pattern. If you're spending a lot of time eating - even if it isn't in one defined period of time - that can easily result in obesity.

There's also the possibility of reduced energy expenditure. This could occur through a lower metabolic rate but that's unlikely. More likely is that obese individuals have reduced physical activity levels.

Earlier you mentioned that environmental changes could have caused the obesity epidemic. Do you think any of these changes would also promote binge eating?

It's possible, because binge eating wasn't even really described until 1994, although it might be that despite not being recognised, it was there. But the increased availability of highly palatable foods in big portion sizes may also have encouraged binge eating. In the old days, perhaps there were just less of these 'binge' type foods available.

Do any of the main eating disorders - anorexia, bulimia and BED - have anything in common? Or are they all experienced by different types of people?

Well eating disorders didn't use to be around very much. So what we think is that certain people have particular vulnerabilities in common - and these can put them at risk of disordered eating given the right circumstances.

For example, maybe 50 years ago a high risk person would have been depressed, but today the same person could develop Binge Eating Disorder.

We also know that eating problems are related to low self-esteem. And in some eating disorders there is a link with perfectionism - particularly in anorexia nervosa, but also in bulimia nervosa.

You could also think of eating behaviours in these disorders as manifestations of an underlying obsessive-compulsive tendency.

Engaging with the Experts (cont. from 6)

People often seem scared of addressing one disorder (e.g. binge eating), and ending up with another one (e.g. anorexia). Do people cross over categories like this?

It's very uncommon that someone with Binge Eating Disorder would become anorexic.

But we do sometimes see movement in the other direction as a result of improvement. For example, someone with anorexia nervosa could move to bulimia nervosa, meaning that they're allowing themselves to eat more and could actually develop binge eating.

Similarly someone with bulimia nervosa who's getting better could actually develop Binge Eating Disorder, which means at least they're suppressing the purging.

Obviously we don't directly encourage substitution of one eating disorder for another, but it is something I've seen clinically.

Can you tell us a bit about Night Eating Syndrome?

When we think about obesity we think about two eating disorders - Binge Eating Disorder and Night Eating Syndrome.

NES was actually described prior to BED but it's only recently getting more attention. Currently people define night eating in many ways and it's impeding the science but I hope that will change.

A group of us met this year and came up with two core features. If you have either one you would be considered a night eater. These core features are eating 25% of more after dinner, or waking up from sleep to eat.

There are also other manifestations which go along with it, and for a diagnosis the person has to have least some. These include the tendency to skip breakfast and to have trouble sleeping.

Another feature is depression that worsens throughout the day. This is different from regular depression, which is generally worse in the morning. In night eaters, evening depression may act as a trigger for eating.

Is Night Eating Syndrome is the result of underlying biological abnormalities? Or is it just a dysregulated pattern of eating and sleeping which becomes hard to break?

As with all disorders it's always difficult to know what's coming first - biological factors or other factors.

But it's now been shown by a group of us that night eaters are more likely to respond to stress and to report increased hunger following stress.

This is also true of binge eaters. So now we are looking at whether binge eaters and night eaters show different stress responses in the morning and the evening. This may distinguish between the two kinds of disorder.

It's also possible that modern society helps to cause night eating. We now live in a global economy and people work around the clock - especially in some areas, like finance.

I once had a night eating patient who would get up almost habitually at 3am and eat. It turned out that he was a former banker and 3am coincided with the opening of the European stock market!

Finally, could you just tell us a bit about what you're working on at the moment? What do you hope to discover over the next few years?

Well one of our projects involves brain imaging and Binge Eating Disorder.

Our preliminary data shows that highly palatable 'binge-type' foods elicit more brain activity in certain regions in binge eaters, as compared to non binge eaters.

We don't know if these abnormalities precipitate binge eating - or whether they are 'maintenance factors', causing the disorder to persist.

One area of activation we found was in something called the premotor area. This area is active where people are planning a motor activity. The section that 'lit up' was the area specifically associated with the mouth. And it wasn't the result of mouth movements because the primary mouth area didn't light up. What we



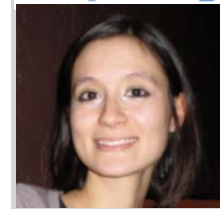
Round-the-clock lifestyles may increase Night Eating Syndrome

we were seeing was the participants thinking about ingesting the foods that they saw.

The exciting implication of this research is that we may be able to use the same methods to test and screen drugs on the basis of the effects they have on the brain. And one day we may be able to design a drug which blocks these neural responses, thereby eradicating the urge to binge.

Please note that the views represented in this interview do not necessarily reflect those of Weight Concern.

Psychology Today blogs



New obesity blog!

Check out our editor's new blog at the Psychology Today website. The views represented do not necessarily reflect

those of Weight Concern...but we can guarantee an interesting read.

<http://blogs.psychologytoday.com/blog/bad-appetite>

FRESH FACES

We are very pleased to welcome new member of staff **Lorraine Evans**. Lorraine will be staffing the Weight Concern desk, acting as a first point of contact for general enquiries. She will be helping us not only to organise training days but also to help us reach out to other organisations and make Shape-up more available across the country.



Finally, we are very pleased to welcome our new volunteer **Lorna Davies**. Lorna is a third year Nutrition and Dietetics Student from King's College. She has been assisting with data collection for Shape-Up Sister as well as providing cheerful general support for the Weight Concern team.

Jessica Walker joined Weight Concern earlier this year as a research psychologist. After graduating from Sussex University with a Masters in Health Psychology, Jessica spent several years working on smoking cessation programmes with minority groups not only in the UK but also in New Zealand! So we are thrilled she will be bringing her experiences to bear as she helps us with the Shape-Up Sister programme (see 'SHAPE UP SISTER! New online programme aims to help hundreds').



Thank you for supporting Weight Concern. We wish you all a very happy Christmas and joyous New Year.

The Weight Concern Team