



Visceral Fat and the Weight Debate

Why we must act now

Europe's obesity epidemic is costing lives and stretching national health services to the limit. It is a major economic burden, with costs attributable to overweight and obesity estimated to be €81 billion across Europe.¹ Now, experts are calling for an urgent focus on the root cause of many serious obesity-related illnesses - visceral fat. This is dangerous fat which, in excess, is linked to chronic diseases such as type 2 diabetes and heart disease, two of the leading causes of death worldwide.

It is fat hidden within the abdomen, and largely unknown by the overweight population. Yet, as this report argues, with awareness and attention, visceral fat can be reduced and so too the number of people at risk from weight-related, life threatening diseases.

Experts in the management of obesity and overweight

Governments are taking time to address the growing impact of the obesity epidemic on the health and resources of our society. The current approach is almost exclusively one of prevention through promotion of healthy diets and physical activity. However, if the epidemic is to be reversed, attention must be given to the treatment and management of people who are already overweight and obese. In the absence of foreseeable policy change, three leading European experts explain that there is much that doctors, pharmacists and individuals can do to address the root cause of several serious weight-related diseases - excess visceral fat.



PROFESSOR STEPHAN JACOB
Endocrinologist & Diabetologist,
Cardiometabolic Institute, Villingen
Schwenningen, Germany

Professor Jacob is a world renowned expert in the field of obesity. He is affiliated to both the International and European Associations for the Study of Obesity and is a founding fellow of SCOPE, an organisation which builds the obesity management expertise of healthcare professionals. An endocrinologist and diabetologist, Professor Jacob runs the Cardiometabolic Institute in the Black Forest in Germany. He has conducted many clinical trials and published extensively in the field of obesity. He is the Co-Chair of the German Obesity Foundation and takes care of many overweight and obese patients in his clinic.

“Visceral fat is strongly linked with type 2 diabetes and heart disease. We must help people understand and address this important fact, so they can make realistic and life enhancing changes to improve their health.”



PROFESSOR DAVID HASLAM,
GP, Chair of National Obesity
Forum, UK

Professor David Haslam is a physician in obesity medicine. He spearheaded both adult and paediatric guidelines for the management of obesity in primary care. Professor Haslam is Chair of the National Obesity Forum (NOF) in the UK and a member of the Counterweight Board. He publishes widely in the media and speaks internationally on obesity and related diseases. Recently published books include ‘Fat, Gluttony and Sloth – Obesity in Literature, Art and Medicine’ and ‘Obesity Epidemic and its Management’, co-authored with Dr. Terry Maguire.

“If no one else in Europe was to gain any more weight, we’d still have an epidemic of obesity on our hands which would very soon translate to epidemics of diabetes, heart disease and premature death. Healthcare professionals have to help people lose weight if we are to have any chance of reversing this epidemic.”



DR TERRY MAGUIRE,
Community Pharmacist & Honorary
Senior Lecturer, Queens
University, Belfast

Dr. Terry Maguire is a community pharmacist and an honorary senior lecturer at Queens University in Belfast. He is a past president of the Pharmaceutical Society of Northern Ireland and a Fellow of both the Pharmaceutical Society of Ireland and the Royal Pharmaceutical Society of Great Britain. Having published extensively on the health-improving role of pharmacy in addressing public health challenges from smoking to obesity, Dr. Maguire runs smoking cessation and weight management services from his pharmacies in Belfast. He has pioneered several successful pharmacy projects, including the landmark Weight Management pilot in Coventry, where over half the adult population is overweight and 23% are obese. He recently published a book, ‘Obesity Epidemic and its Management’, co-authored with Prof. David Haslam.

“Most overweight people see themselves as having a body image issue – not a health problem. We need to increase individual motivation to lose weight sensibly by helping people understand the health benefits of weight loss as well as the cosmetic results.”



Visceral fat is at the core of many serious obesity-related diseases

At the centre of the obesity crisis is a critical lack of awareness of the dangers of visceral fat - the hidden abdominal fat that increases the risk of life-threatening disease.²⁻⁷

An alarming 88% of respondents in a recent pan-European survey of over 12,000 people looking to lose weight* said they had never heard of visceral fat or didn't know what it was.

Experts say even doctors are ignoring the issue. "Physicians simply didn't learn about visceral fat and waist circumference at university. Obesity wasn't seen as a disease," says Professor Jacob. Professor David Haslam agrees, "At medical school we learned that fat is an inert energy storage unit. Now we see different evidence, but if physicians aren't paying attention to the issue, why should their patients? This is a situation that has got to change or people will just continue to get fatter - with all the resultant problems."

*See footnote on back cover

"THERE'S STILL A COMMON ACCEPTANCE THAT A BIT OF A BELLY IS NO BAD THING, A SIGN OF PROSPERITY AND COMFORT"

PROF. STEPHAN JACOB

VISCERAL FAT IS STRONGLY LINKED WITH HEART DISEASE AND TYPE 2 DIABETES, TWO OF THE LEADING CAUSES OF DEATH WORLDWIDE

ONLY 24% OF RESPONDENTS THOUGHT BEING OVERWEIGHT IS A SERIOUS RISK TO LONG-TERM HEALTH

"PEOPLE FOCUS TOO MUCH ON THE FAT THEY CAN SEE, AND NOT THE REALLY DANGEROUS STUFF HIDDEN INSIDE."

PROF. DAVID HASLAM

What is visceral fat?

Unlike the visible fat just under the skin (subcutaneous fat), visceral fat surrounds the vital organs in the abdomen. You can't see it or feel it, but it directly increases the risk of life-threatening disease.

WATCH YOUR WAIST SIZE

Waist measurement is regarded as the best clinical indicator of excess levels of visceral fat and, therefore, the best predictor of risk. In adults, health risks increase with a waist measurement of over 102 cm (40 inches) for males, and over 88 cm (35 inches) for females.⁸ However, certain ethnic groups may have an increased risk at lower waist sizes. For South Asians for instance, health risks increase with a waist measurement of 90 cm (35 inches) and over for men and 80 cm (32 inches) and over for women.⁹

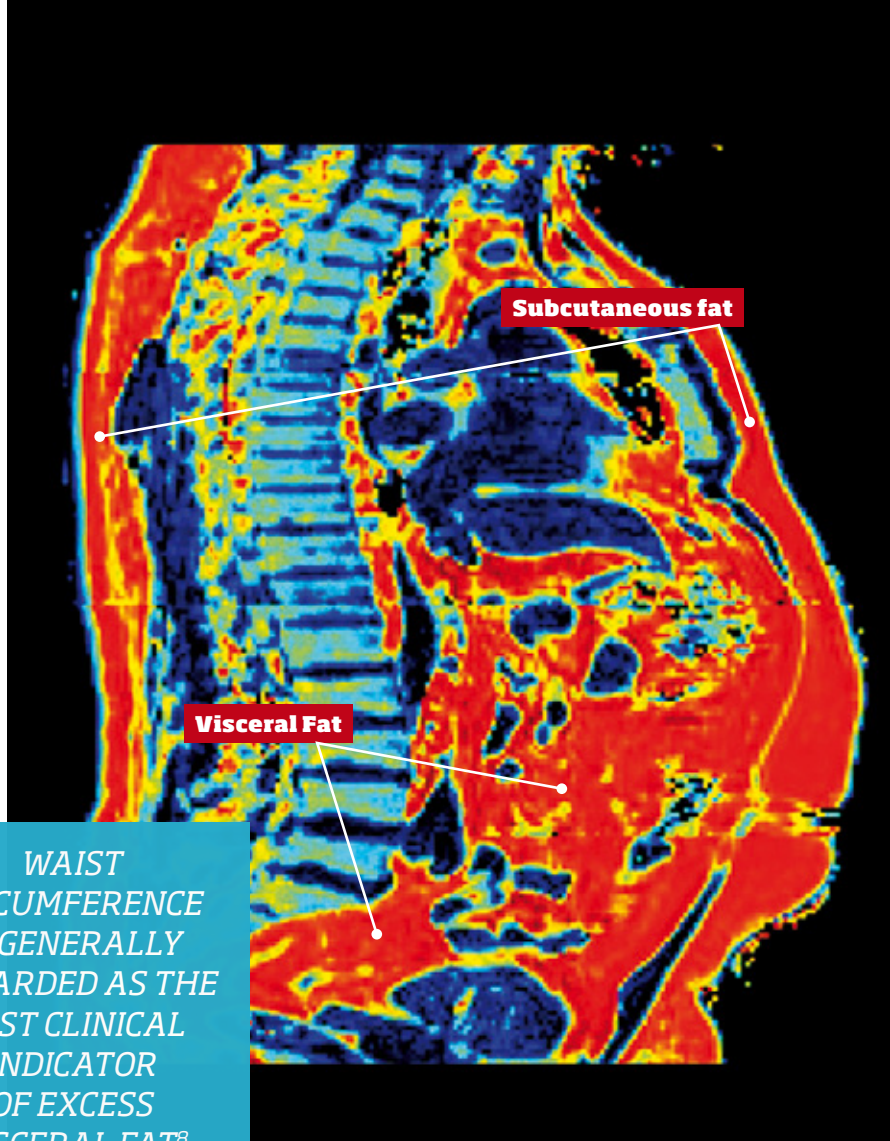
DANGEROUSLY ACTIVE FAT

Visceral fat releases a variety of substances such as inflammatory proteins and hormones, some of which can affect the arteries, increasing the risk of thrombosis and stroke.¹⁰⁻¹⁷ Visceral fat also releases fatty acids that enter the liver, the body's metabolic powerhouse.^{14,16-18} This interferes with the way our bodies use glucose and fats, paving the way for problems like type 2 diabetes and high blood pressure.^{10,11,13-18}

Compared with other types of fat stored in the body, visceral fat is more easily broken down to release energy.¹⁹ "Visceral fat was intended as a very important, quickfire energy source for survival," explains Professor Jacob. "Millions of years ago, men in their role as hunter-gatherers sometimes needed to fast for long periods. Hence

WAIST CIRCUMFERENCE IS GENERALLY REGARDED AS THE BEST CLINICAL INDICATOR OF EXCESS VISCERAL FAT⁸

MRI scan clearly shows the visceral fat surrounding the vital organs in the abdomen.



they evolved to store visceral fat, which can be rapidly broken down to provide essential energy for the brain and body. Nowadays we don't work hard enough for what we eat, so we accumulate potentially dangerous levels of visceral fat."

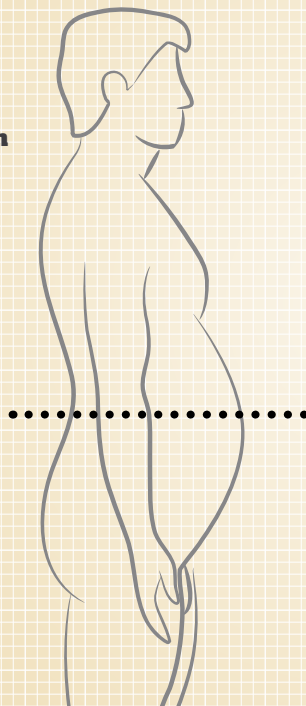
IGNORANCE IS THE ENEMY

"Steady weight loss with a 5-10% decrease in bodyweight can considerably reduce visceral fat and benefit health, but it must be done correctly," says Prof. Haslam. "Fad diets, which usually promise quick fix weight loss, are unsustainable. They can actually do more harm than good. Invariably weight is put back on, with some of the weight regained as visceral fat."

HOW TO MEASURE WAIST CIRCUMFERENCE

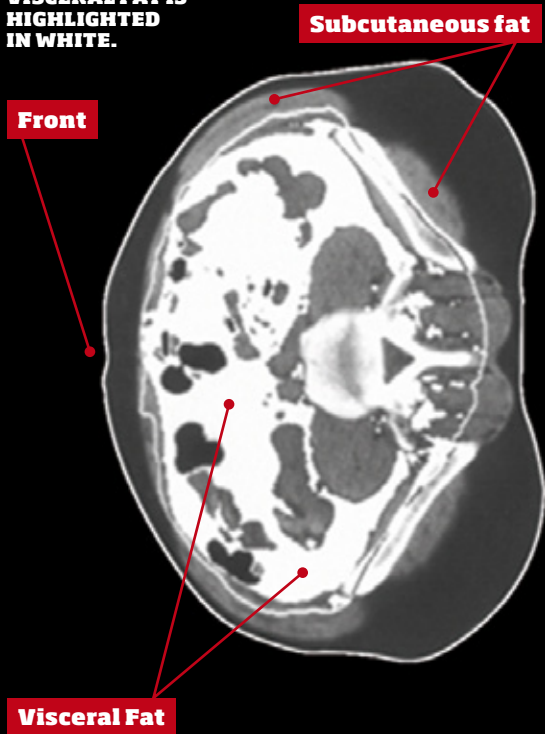
Pass a measuring tape around the abdomen, at the midpoint between the bottom rib and the top of the hip bone.²⁰

Men have more visceral fat than women, whose visceral fat levels tend to increase after the menopause



79% OF SURVEY RESPONDENTS* WHO GAIN WEIGHT NOTICE IT FIRST AROUND THE WAIST

AN MRI IMAGE OF VISCERAL FAT FROM INSIDE THE BODY. VISCERAL FAT IS HIGHLIGHTED IN WHITE.



MOST PEOPLE FAIL TO SUSTAIN WEIGHT LOSS

The survey* reveals that 61% of overweight Europeans will resolve to slim down this January. 37% said they had previously dieted at New Year, but two thirds of these respondents subsequently regained their weight. "Sustainable weight loss means setting realistic goals, committing to small achievable changes, knowing what does and doesn't work for you," says Dr. Maguire. "If you think you hate exercise, do it more gently, or totally differently. Stay conscious of what motivates you and where you struggle."

Professor Jacob finds that many of his patients need to relearn self-care. "Dramatic change doesn't work for humans. What's important is to be realistic. It's the tiny attitude changes that build new habits and result in gradual, steady weight loss."

FOCUS ON VISCERAL FAT, NOT JUST VISIBLE FAT

"People have to become more aware of the dangers of visceral fat, rather than focusing purely on visible fat," says Terry Maguire. In his experience, weight will always be a cosmetic issue, but the health message is potentially very powerful. "By educating the public on health risks, we can significantly increase their motivation to lose weight successfully."

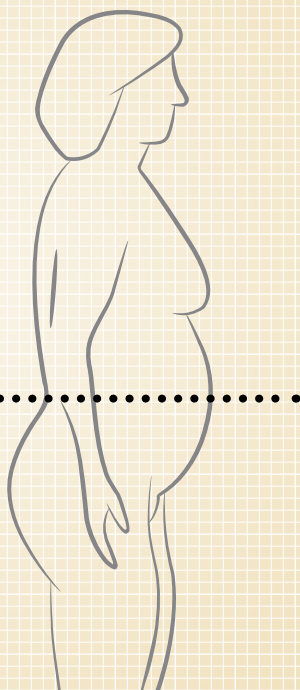
AWARENESS AND UNDERSTANDING INCREASES MOTIVATION

Amongst all individuals surveyed, when prompted with information about the dangers linked to visceral fat, 61% became more motivated to lose weight, with 25% being much more motivated. Motivation was even higher (75%) amongst those who had failed to lose weight previously.

*See footnote on back cover

"EXCESS VISCERAL FAT IS A GLAND GONE BAD"

PROF. DAVID HASLAM



**HEALTH PROFESSIONALS
MUST DO MORE**

“Society has a problem which government preventative measures are trying to address. While we wait for those to have an impact, healthcare professionals can act now to support those already obese,” says Dr. Maguire. “Active intervention takes the form of a sensitive and practical approach.”

**PHARMACY IS AN
UNDERUSED RESOURCE**

Pharmacy is well placed to help. “Plenty of successful weight management projects have played out in European pharmacies,” says Dr. Maguire. “Wherever we tackle it, the personal approach is key. We find out what motivates the individual, the small changes he or she can sustain. The patient has to want to lose weight, but you can help them realise that.”

**GPS ALSO NEED
TO PAY ATTENTION**

The link between visceral fat and disease isn't hitting home with GPs either. “Doctors were trained to see fat as an inert substance. Now we know better, but we need to pay more attention,” says Professor Haslam. “Best practice in weight management can be done in the last few minutes of a consultation. You check the signs, explain the risks and agree on realistic goals. Counselling is very motivational, you have to get patients back for regular review and ongoing support.”

**THE BAD NEWS,
GOOD NEWS STORY**

“The bad news is that visceral fat is dangerous. It is strongly linked with weight-related life threatening diseases and this needs to become more widely understood,” says Professor Jacob.

The good news is that just a small amount of weight loss will significantly reduce health risks.²²⁻²⁶ Some overweight people simply don't succeed on their own²¹ – and knowledge of health risks might be the push they need to ask for help. 29% of people questioned in the survey indicated that they were more likely to consult a GP or pharmacist for weight loss advice having learned about the dangers of visceral fat.

This is good news, but it means that healthcare professionals must be prepared to provide the awareness and motivation that can precede successful weight loss. Perhaps only then will we see a much needed reduction in the numbers of people suffering from weight-related life threatening diseases.



European research examining weight loss attitudes and habits

12,161 Europeans wanting to lose weight were recently questioned in 21 countries, on behalf of GSK, to gauge:

1. their dieting habits, particularly around the New Year period
2. their awareness of visceral fat and the health risks
3. whether health information increases their motivation to lose weight and seek help to lose visceral fat.

DIETING HABITS

- Total respondents wish to shed an average of 8.68 kgs and, almost two-thirds (61%) are resolving to lose weight in January 2010.
- Of the 37% who have previously dieted at New Year, two thirds subsequently put their weight back on.
- 79% are most likely to first gain weight around their stomach and waist.
- A healthier body is top priority in 2010, with 32% and 29% of respondents prioritising to exercise more and lose weight respectively.

HEALTH RISKS

- Only 24% consider being overweight as the most serious risk to long-term health, reinforcing the need for more education.
- Three quarters (75%) currently prioritise either smoking, excessive drinking or inactive lifestyles as the No.1 risk.
- 88% do not know what visceral fat is, and so are oblivious to the associated health risks.
- One fifth (18%) incorrectly believe that visceral fat is either found around the ribcage, thighs, bottom or arms. As only 12% of respondents claim to actually know what visceral fat is, it is likely that many of the 80% who correctly thought this fat is located around abdominal organs, in fact took an educated guess.

At this stage in the questioning participants received a prompt:

“Please assume that the following information is true: Visceral fat is located around the vital organs in your abdomen. It increases your risk of developing heart disease, diabetes, hypertension and, suffering a stroke. It has been shown that losing even a small amount of weight will reduce the amount of visceral fat and associated risks.”

CHANGING BEHAVIOUR

Having heard this information:

- 61% became more motivated to lose weight, 25% much more so.
- Amongst respondents who had unsuccessfully tried to lose weight previously and who are planning to lose weight this New Year, motivational levels rose even higher to 75% ‘more motivated’ and 36% ‘much more’ so.
- Almost half (49%) are more likely to seek help to lose excess visceral fat.
- Amongst previously unsuccessful dieters who are planning to lose weight this New Year, this figure increases to 73% ‘more likely’ to seek help with almost a third saying they are ‘very likely’.
- 29% of respondents are likely to first seek this help from their GP or pharmacist, 30% from a gym or health club and 17% from the internet. Amongst previously unsuccessful dieters, 32% would first seek help from their GP or pharmacist.

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*ICM Research interviewed a random sample of 12,161 adults aged 30-59 years old, across 21 European markets using a mixed approach of online and telephone research in October 2009. Respondents were contacted on a nationally representative basis and qualified for the survey if they were looking to lose at least 2lbs in weight. ICM is a member of the British Polling Council and abides by its rules. Further information at www.icmresearch.co.uk