Obesity represents an exponential challenge in societies throughout the world. Dr Nikhil Dhurandhar, President of The Obesity Society and Professor and Chair in the Department of Nutritional Sciences at Texas Tech University, discusses how developing a science-based understanding of this complex condition will lead to improved treatments and oppose harmful misconceptions about the nature of obesity.
**OBESITY IS A DISEASE.** The American Medical Association clearly stated this almost two years ago, and the Obesity Society has striven to reinforce this message for years. Obesity is not a matter of choice or a matter of having poor willpower; it is a disease that needs to be taken seriously and treated seriously.

Sadly, there is enormous stigma attached to obesity. This is something that deeply intrigues me; with 60-70 per cent of the US population classified as overweight or obese, who is driving this stigma? My opinion is that these negative attitudes often stem from the mistaken yet deeply rooted belief that obesity is not a disease. The idea of someone being laughed at for having cancer is ludicrous – and yet ‘fat jokes’ are often seen as being okay. I think this is also connected to the fact that obesity is a disease that people literally wear; someone with obesity does not need to tell you that they suffer with it – you can see it and it is therefore much easier to target. I believe that this is an area where we need to focus educational efforts and put out a strong message: obesity is a disease, not some sort of moral failure.

As for policies, we need to be very careful that they are grounded in scientific evidence. While most policies are well-meaning and well-intentioned, it is important to take a step back and ask whether they have a solid scientific basis. However, although strong policies are inextricably linked to understanding obesity, we do not have a full understanding of the disease at present. Yes, we know that surplus energy in the body is stored as excess fat. But this fails to answer the all-important question: why might an individual have positive energy balance? Moreover, why is it that some people can stop eating when they feel full and others cannot?

Obesity is a multifactorial and multi-aetiological disease – and there are many upstream factors that could lead to positive energy balance. For instance, a plethora of hormones are involved in determining when we feel hungry or full, and in some ways we have barely begun to scratch the surface here. Some studies have shown that infections or inadequate amounts of sleep also contribute to obesity, and complex intrauterine factors – regarding the influence of experiences in the mother’s womb – are also at play, which will shape the future metabolic pathways of the foetus.

Unfortunately, although obesity is incredibly challenging to treat, it is not considered to be so by many. The all-too-common attitude is that obesity will simply go away if only people could bring themselves to eat less and exercise more. Yet this grave misconception is hurting obesity even more; indeed, perceiving this condition as simple to treat is blocking our approach to finding real cures. In the medical community, we need to recognise the limitations of what we are advising people to do and come up with strategies for meaningful and biologically significant weight loss that can be maintained for long periods of time.

In my opinion, ‘obesity’ is the wrong word – it should be termed ‘obesities’ to convey that there are multiple diseases that resemble one disease. Take cancer as an example; rather than being one disease, multiple diseases are called cancer. Similarly, obesity is not one disease – and yet the treatment we offer today is almost blanket, regardless of the cause. If we focused more on discovering the different causes of obesity in specific individuals, and then implemented cause-specific treatments, this could lead to better results. Ultimately, more research is absolutely crucial to building a fuller understanding of obesity so that we can better control it.

In addition to inflicting acute personal discomfort, obesity also carries a huge healthcare burden, increasing the risk of cardiovascular disease, hypertension, stroke and diabetes among affected individuals. All of these conditions are expensive, placing an economic burden on developed and developing countries alike. Another worry is that we don’t know how future generations will be affected by obesity. For instance, increasing numbers of children today are being diagnosed with type 2 diabetes; if current trajectories continue, what will we see in the future?

At present, we are in the middle of a global obesity epidemic, and we do not fully understand what is driving it. The fact is that there are multiple causes of obesity; some of which we already know and others which are as yet undiscovered. It is essential that we continue our quest to identify strong, multifaceted prevention and treatment strategies that help to curb the rise of obesity in the world.

**SPOTLIGHT ON THE OBESITY SOCIETY**

**Vision**
To better understand, prevent and treat obesity to improve the lives of those affected through research, education and advocacy

**Values**
The Society is committed to improving the lives of those with obesity, nurturing the careers of obesity scientists and practitioners and promoting the interdisciplinary nature of obesity research, management and education. Members and staff pledge to uphold:

- **Compassion** – for the lives and situations of those living with obesity
- **Responsibility** – for advocacy, treatment and investigation, all working toward a cure for obesity
- **Respect** – for each other and all who are touched by obesity
- **Progress** – for furthering knowledge about obesity using appropriate scientific standards
- **Mentorship** – for helping, teaching and supporting our colleagues
- **Highest Ethical Standards** – for all our actions, writings, programmes and services