



HEALTH

## Obesity Is a Form of Premature Aging, Scientists Say, And We Need to Rethink It

PETER DOCKRILL 27 FEBRUARY 2020

Worldwide, over [2 billion people](#) are overweight or obese. Obesity figures have almost tripled since 1975. In children and adolescents, it's even worse, with a [ten-fold increase](#) in the same time-frame. What are we doing wrong here?

Perhaps we've been looking at the obesity epidemic the wrong way, scientists say. In a new study, they suggest – somewhat provocatively – that we've missed what obesity actually represents.

Obesity, the team claims, is essentially a form of premature ageing – something that endangers our health and shortens our lives in ways that are remarkably similar to the inevitable processes of getting older and succumbing to age-related diseases.

"We are trying to comprehensively make the argument that obesity parallels ageing," [says](#) clinical nutritionist Sylvia Santosa from Concordia University in Canada.

"Indeed, the mechanisms by which the comorbidities of obesity and ageing develop are very similar."

In Santosa's new research, she and her co-authors reviewed over 200 studies looking at the effects of obesity, ranging all the way from cellular and molecular effects to the condition's impact on the immune system, cognition, mobility, and more.

The upshot of their analysis is that obesity, in terms of its burden on health, is effectively a mirror of ageing: a condition that predisposes individuals to the early onset of the chronic diseases we usually associate with getting older.

To be clear, while the researchers state that obesity accelerates ageing, they are not really suggesting that ageing and obesity are literally the same thing. Rather, to the extent that we can draw parallels between the concepts from the perspective of pathology, obesity and ageing are ["two sides of the same coin"](#).

"I ask people to list as many comorbidities of obesity as they can," [Santosa says](#). "Then I ask how many of those comorbidities are associated with ageing. Most people will say, all of them. There is certainly something that is happening in obesity that is accelerating our ageing process."

In terms of how, the researchers cite numerous examples of potential mechanisms, including things like obesity-based mitochondrial dysfunction, systemic inflammation, and weakened immune system responses. They also discuss the shortening effect obesity [is thought to have on telomeres](#), which act as protective caps on the end of DNA strands, and are linked to longevity.

It's a compelling argument, all told, and the amount of crossover is certainly substantial. But it's also worth bearing in mind that the researchers' central point is mainly a list of comparisons, not an outright equation of the two separate things.

For now though, the drawing of that comparison may be enough to do some good. Ultimately, what the researchers want is to give us a new paradigm for thinking about what obesity looks like, with a view to helping us treat this overwhelming issue in global health.

Other obesity studies [have similarly attempted to reframe the context of the problem](#), and given the chronic severity of the obesity epidemic, fresh perspectives to characterise the condition are something we can definitely use, no matter what shape the analogy takes.

"I think it is a good idea because people often may not be so worried about the message about losing weight, people can switch off to that, they've heard it before," general practitioner Elizabeth Crouch, who wasn't involved with the study, [told newsGP](#).

"[This] puts it into perspective for people. That might be a wake-up call... The more objective information we have, the better."

The findings are reported in [Obesity Reviews](#).

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