Weight loss -- not one size fits all

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There is no "one size fits all" when it comes to weight loss through exercise, says Queensland University of Technology behavioural scientist Neil King.

Dr Neil King, from QUT's Institute of Health and Biomedical Innovation, is the lead author of a study conducted in collaboration with the University of Leeds in the UK, which has been published in the latest edition of the *International Journal of Obesity*.

"When it comes to losing weight, a lot of people assume if you lose less than the predicted weight then you aren't exercising enough, and that is why you aren't getting the desired results," Dr King said.

"This study is the first evidence-based study that shows despite people doing the same amount of supervised exercise people lose different amounts of weight."

The study, which focused on 35 overweight and obese people from the UK, sought to identify and characterise the variability in exercise-induced weight loss.

Participants undertook a 12-week supervised exercise program that was individually tailored to expend 500 calories per session. During this time their weight loss and behavioural outcomes were monitored.

Dr King said the study found the role of exercise as an effective weight management method could be undermined by "compensatory responses"

such as a person's increased hunger and food intake as a result of their increased energy expenditure.

"People, who we refer to as compensators, are those who compensate for the increase in exercise-induced energy expenditure, by adjusting their food intake" he said.

"For some people this might be in responses to an automatic biological drive, whereas for others it might be a deliberate reward-based increase."

Dr King said what this study showed was that some individuals were predisposed to compensatory responses, rendering them resistant to the theoretical weight loss benefits of exercise.

"The individual variability here demonstrates the need to treat people as individuals," he said.

"It also highlights the importance of determining the mechanisms that may explain this variability, such as how to treat the more resistant compensatory person to improve their weight management outcomes.

"Those resistant to exercise might be better suited to weight management strategies which include controlled dietary intake, in addition to exercise."

Dr King said the novelty and therefore the strength of this study, was that the exercise was supervised.

"Therefore, unlike unsupervised exercise interventions, any variability in weight loss cannot be explained by differences in exercise compliance," he said.

Source: Queensland University of Technology