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Our Biology Working Against Us if We Want to Lose Weight

It has been known for many years that most people who lose weight regain it. The reason for this is that the body defends weight very vigorously. The way it does this is by making the individual more hungry after weight loss, a hunger that persists for the rest of the individual's life. How does the body do that? We all have 10 hormones in the blood that can influence hunger. Six are made and released by the gut, 3 from the pancreas and 1 from fat. The gut hormones are Ghrelin (which stimulates hunger), CCK, PYY, GLP-1, Oxyntomodulin and Uroguanilin. The pancreatic hormones are Amylin, Insulin and pancreatic polypeptide. Fat cells make Leptin (all of which inhibit hunger). After only 4-5 Kg weight loss, Ghrelin levels increase in the blood and all of the hunger suppressing hormones decrease making the individual more hungry. These changes are persistent. We got evidence up to 3 years and a study from America showed that leptin was still lower 6 years after weight loss. In addition to increased hunger, the other thing that encourages weight regain is a reduction in energy expenditure by 300 calories/day which is not a reduction in metabolism but spontaneous activity. This defence in body weight is further proof that all of Obesity is genetic or epigenetic.

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Biography

Joe Proietto was a Professor of Medicine, in the Department of Medicine Austin Health, University of Melbourne. He is a past President of the Australian and New Zealand Society Obesity Society (ANZOS) and was the Chair of the Program Organising Committee for the 10th International Congress of Obesity Sydney. He has been on the Council of the Australian Diabetes Society and has served on the Board of Diabetes Australia acting as chairman of its Medical Educational and Scientific Council. He was Chairman of the National Association of Diabetes Centres. He has published over 170 papers.