Is the treatment of obesity futile?

Jana Havrankova MD CSPQ

YES

Ms D. is 56 years of age. She has diabetes and hypertension and has been obese since her teens (body mass index of 33 kg/m^2). She has tried diets both on her own and with the help of a nutritionist. She knows that she needs to lose weight and I encourage her to do so whenever I see her. Last year, she enrolled in a weight management program and lost 6 kg. She was very proud of this accomplishment and I congratulated her. Unfortunately, 6 months later, she had gained it all back.

This is a common story. Even though we should encourage our patients to lose weight, clinical experience has shown that, without surgery, permanent change is limited.

The Canadian Clinical Practice Guidelines on the Management and Prevention of Obesity in Adults and Children[1] suggest several weight–loss strategies. However, the authors acknowledge that keeping the weight off is problematic. Maybe we—care providers and patients—are going about this the wrong way. Maybe we do not have the right tools. Or maybe we are not trying hard enough or long enough. What do the studies have to say?

Not a pretty picture. Studies on obesity are generally of short duration; withdrawal rates are either high or not reported. In their systematic review of studies published between 1931 and 1999, Ayyad and Andersen[2] were only able to retain 17 of the 898 studies examined. Ten studies were controlled and, of these, 5 were randomized. On average, 15% of subjects (0% to 35%) succeeded in maintaining their initial weight loss. This is, of course, the best possible scenario: only individuals who are motivated and who agree to long-term follow-up complete such studies. A very low–calorie diet accompanied by behavioural therapy and active follow-up appears to offer good results for a small percentage of patients.

Dansinger et al[3] performed a meta-analysis of studies published between 1980 and 2006; they, too, encountered studies of mediocre quality. They concluded that the interventions result in modest weight loss—a decrease in body mass index of 1.5 to 2.3 kg/m^2—after 12 months of treatment, which is gradually regained over time.

And how much stock can we put in the voluntary testimonials that are sometimes used to evaluate the success of weight loss?[4]

Misconceptions about body weight. Many people hold beliefs that mitigate against weight loss; we need to educate them.

- "I eat well and I'm still putting on weight!" This statement is often accompanied by "I eat a lot of fruit and vegetables and I'm still putting on weight!" Healthy eating is not synonymous with weight loss. A patient who eats one extra apple a day (containing 80 calories) could gain as much as 3 kg per year.
- "I exercise a lot but I can't lose weight!" People tend to overestimate how many calories they burn when they exercise. Those who engage in a mild form of exercise on an occasional basis tend to reward themselves with a little treat—often containing more calories than they just burned.
- "I drink lots of water and yet …" Water does not dissolve fat, nor does it dilute calories. Drinking lots of water in order to feel full and to take the edge off one's hunger is a very short-term strategy.
- "I eat less than my friend. I'm putting on weight and she is losing it!" The only people we can compare ourselves to are our families. The storage of energy in the form of fat is a genetically determined strategy for surviving during periods of famine. Until recently, most people could rely on performing physical work and a limited food supply to avoid an expanding waistline.
- "I have to accept myself as I am." This is true if you are only a few kilograms overweight. It is not true if you are obese. There is irrefutable proof that obesity is damaging to one's health. We are all now aware that it is a source of many physical and psychological problems.

Capitalizing on our desire to lose weight. Like Ms D., most people who are obese want to lose weight. And there is an entire industry waiting to help them, with an almost infinite range of products and services.

In 2010, BCC Research published an article on the weight loss market in the United States.[5] In 2009, this market was estimated at $121 billion. It was estimated that it would reach $134 billion by 2014. It reports that as obesity rates in the United States continue to climb, the weight–loss industry grows stronger and stronger. If the strategies it sells worked, we could at least say that people get their money's worth. Sadly, we know that this is not the case.

The few patients who manage to lose weight and keep it off achieve something truly remarkable. From a public health standpoint, however, the treatment of obesity is a failure.

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Prevention, first and foremost. There is very little evidence that the treatment of obesity works. As a result, we should be focusing on prevention. Efforts at prevention involve some degree of telling people what to do, and some people will criticize this. Screening and monitoring excess weight from early childhood, ensuring that physical activity is part of the curriculum right up to university, creating neighbourhoods that encourage people to get out and walk, and teaching people how to prepare healthy meals are just a few suggestions. Would these efforts at prevention cost much? What we really need to remember is that the individual and collective cost of obesity is astronomical.

For every individual who wants to lose weight, I maintain hope. For society, however, what gives me hope is prevention.

Dr Havrankova is an endocrinologist at Clinique familiale Saint-Lambert in Quebec.

Competing interests
None declared

Correspondence
Dr Jana Havrankova, Clinique familiale Saint-Lambert, 209 Woodstock, Saint-Lambert, QC J4P 1W7; telephone 450 466-8583; fax 450 466-4072;
e-mail **janahavrankova@videotron.ca**

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CLOSING ARGUMENTS

- Even though we should continue to encourage individual patients to lose weight, clinical experience teaches us that the long-term success of non-surgical treatment of obesity is limited.
- Prevention efforts beginning in childhood provide the best hope for public health.

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Dr Garrel is a specialist in endocrinology and metabolism and Full Professor in the Department of Nutrition at Université de Montréal in Quebec. He also works in a multidisciplinary weight management clinic in Montreal.

Competing interests
None declared

Correspondence
Dr Dominique Garrel, Hôtel-Dieu Hospital, Endocrinology, 3840 St Urbain, Montreal, QC H2W 1T8; telephone 514 890-8444;
e-mail **dominique.garrel@umontreal.ca**

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CLOSING ARGUMENTS

- Assess the health risks of excess weight and treat any comorbidities.
- Organize multidisciplinary support for lifestyle changes.
- If necessary, refer the patient for bariatric surgery.

The parties in these debates refute each other's arguments in rebuttals available at **www.cfp.ca**. Join the discussion by clicking on **Rapid Responses** at **www.cfp.ca.**