

Maintenance of Lost Weight and Long-Term Management of Obesity



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KEYWORDS

- Obesity treatment • Weight loss • Weight maintenance • Behavioral counseling
- Appetite • Physiology

KEY POINTS

- Long-term maintenance of lost weight is the primary challenge of obesity treatment.
- Biological, behavioral, and environmental factors conspire to resist weight loss and promote regain.
- Treatment of obesity requires ongoing attention and support, and weight maintenance-specific counseling, to improve long-term weight management.
- The magnitude of long-term weight loss typically achieved is usually lower than patient and health care provider expectations. However, even small amounts of sustained weight loss lead to clinical health improvements and risk factor reductions.

INTRODUCTION

Robert is a 47-year-old patient who initially weighed 120 kilograms. He lost 40 kilograms 3 years ago by carefully following your guidance to decrease his caloric intake to 1500 calories per day and exercise 6 days weekly. Today he comes in for his annual physical examination. You were excited to hear about his continued progress and see how much more he's lost, but you felt immediately dejected to see that he had regained almost 30 kilograms. "I don't know what to do...the weight keeps coming

Funding: This research was supported by the Intramural Research Program of the NIH, National Institute of Diabetes & Digestive & Kidney Diseases.

Conflicts of Interest: K.D. Hall has received funding from the Nutrition Science Initiative to investigate the effects of ketogenic diets on human energy expenditure. K.D. Hall also has a patent on a method of personalized dynamic feedback control of body weight (US Patent No 9,569,483; assigned to the National Institutes of Health). S. Kahan has no relevant disclosures.

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Med Clin N Am 102 (2018) 183–197
<https://doi.org/10.1016/j.mcna.2017.08.012>
0025-7125/18/Published by Elsevier Inc.

medical.theclinics.com

back on. I keep trying, but there must be something wrong. I'm sure my metabolism is in the dumps. It feels like every moment of the day I can't help but think about food—it was never like this before I lost the weight. And no matter how hard I try to stop eating after one serving, I just can't seem to do it anymore." Feeling defeated, he says, "I don't even know what's the point of doing this anymore!" Frustrated, you remind him that he was able to do it just fine when he was losing weight initially, and he just needs to keep working hard at it. "I know it's not easy, but I can't help you unless you're willing to help yourself. You just need to work harder and take control of this again." You feel for him, but you know that you need to be stern to get him past this backsliding. Hoping to motivate him, you remind him how bad he will feel if he regains more weight, and you tell him to make a follow-up appointment for 6 months and warn him that if he doesn't turn things around quickly he will have to restart his blood pressure medications.

Substantial weight loss is possible across a range of treatment modalities, but long-term sustenance of lost weight is much more challenging, and weight regain is typical.¹⁻³ In a meta-analysis of 29 long-term weight loss studies, more than half of the lost weight was regained within 2 years, and by 5 years more than 80% of lost weight was regained (Fig. 1).⁴ Indeed, previous failed attempts at achieving durable weight loss may have contributed to the recent decrease in the percentage of people with obesity who are trying to lose weight,⁵ and many now believe that weight loss is a futile endeavor.⁶

Here, the authors describe their current understanding of the factors contributing to weight gain, physiologic responses that resist weight loss, behavioral correlates of successful maintenance of lost weight, as well as the implications and recommendations for long-term clinical management of patients with obesity.

WHY IS IT SO DIFFICULT TO LOSE WEIGHT AND KEEP IT OFF?

The Obesogenic Environment

Long-term weight management is extremely challenging because of interactions between our biology, behavior, and the obesogenic environment. The increase in obesity prevalence over the past several decades has been mirrored by industrialization of the food system,⁷ involving increased production and marketing of inexpensive, highly processed foods⁸⁻¹⁰ with supernormal appetitive properties.^{11,12} Ultraprocessed foods¹³ now contribute most of the calories consumed in America,¹⁴ and their overconsumption has been implicated as a causative factor in weight gain.¹⁵ Such foods are typically more calorically dense and far less healthy than unprocessed foods, such as fruits, vegetables, and fish.¹⁶ Food has progressively become cheaper¹⁷; fewer people prepare meals at home,^{18,19} and more food is consumed in

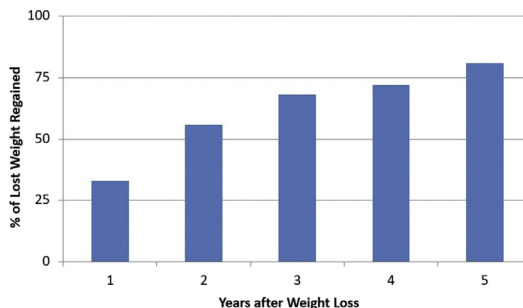


Fig. 1. Average time course of weight regain after a weight loss intervention. (Data from Anderson JW, Konz EC, Frederich RC, et al. Long-term weight-loss maintenance: a meta-analysis of US studies. *Am J Clin Nutr* 2001;74(5):579-84.)

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