
Preface

The first edition of *The Management of Eating Disorders and Obesity* was published in 1999, just after the removal of fenfluramine and dexfenfluramine from the market because of the association of their use with development of valvular heart disease (1). Dr. Albert J. Stunkard expressed the possibility that drug therapy would come to a “screeching halt” and that legal actions would cause prescribers to avoid obesity pharmacotherapies and cause pharmaceutical companies to discontinue development of future obesity therapies. Prescription of drugs for obesity treatment did decrease and the US Food and Drug Administration required additional evidence of safety prior to approval of new anti-obesity agents for marketing, but drug development did not stop. To the contrary, our improving understanding of the genetic basis of eating behaviors has expanded the number of molecular targets for obesity pharmacotherapies, and many novel molecular entities are being evaluated. Recently, the effects of ephedrine and similar compounds on blood pressure and the risk of stroke (2,3) have been more generally recognized, and ephedrine-containing products have been withdrawn from the market.

In 1999, I noted that eating disorders and obesity were common and their prevalence was increasing. Unfortunately, this trend has continued to the degree that obesity has been called an epidemic (4). In 2004, the obesity-related mortality rate nearly overtook that of cigarette smoking. Underlying this increase in obesity is the abundance and variety of food, as well as the commercialization of the food industry, promoting more eating, larger portions, and high caloric density foods. Threats of litigation of “fast food” chains and social pressures may have encouraged these companies to add more healthful items to their menu and many have added low carbohydrate selections in an effort to capitalize on the recent trend for low carbohydrate diets. This is discussed in Chapter 19.

Obesity and associated diseases continue to cost society more than \$100 billion in direct and indirect health costs annually. Treatment of eating disorders and obesity continue to be suboptimal. All tend to be best managed by experts and for obesity, maintenance of weight loss continues to be challenging, even in the best medically managed centers.

Associated with obesity is a societal stigma that leads in part to the emphasis on being thin and adds pressures toward attainment of lean body habitus, thus enhancing the development of the potentially life-threatening anorexia nervosa and bulimia nervosa. These eating disorders and obesity are disorders of ingestion—either too much or too little, too much control or too little, with purging behavior or without. All have significant health, social, and psychological consequences.

That is the bad news. So what is the good news? There is increasing awareness about eating disorders and their predispositions. Efforts are expanding on prevention, early identification, and intervention of eating disorders. Clinicians are developing treatment strategies incorporating newer technologies, including the internet, which might eventually reduce the cost while improving access to and effectiveness of therapy. Regarding

obesity, there is greater focus on prevention, and strategies for prevention are being evaluated. Researchers are identifying the effects of maternal behaviors during pregnancy that “imprint” the fetus for increased postnatal weight gain and obesity-associated disease complications. As we learn about such effects, we may be able to recommend behaviors for pregnant women that would reduce the future risk for their infants. Increasing pressure for companies to improve the ingredients in their prepared foods has led many to respond in positive ways. School lunches have been placed under more scrutiny. Schools are attempting to educate students about nutrition and are attempting to encourage better eating and increased activity and exercise. More is understood about effective methods for maintenance of reduced weight and these methods are being incorporated into therapeutic programs. The molecular basis of obesity is being more effectively probed and many neuroendocrine mediators have been identified.

This second edition follows the structure of the first edition in that it consists of three major sections, one each for bulimia nervosa, anorexia nervosa, and obesity. Each section contains brief, practical, and timely reviews of the disorder or aspects of management. The reviews have been updated to incorporate recent findings and new chapters have been incorporated. The goal remains to provide assistance to practitioners who want to realize the maximal impact when caring for patients with eating disorders or obesity. Not only are present therapies described, but developing therapies are identified as well.

The unifying principle underlying the treatment of eating disorders and obesity is the establishment of healthful behaviors and the ideal of also attaining a healthy weight. So Drs. Romano and Blackburn and colleagues discuss the health consequences of bulimia nervosa (Chapter 1), anorexia nervosa (Chapter 5), and obesity (Chapter 10). Then Dr. Busk and colleagues discuss the health benefits of increased activity and exercise (Chapter 13). Increasing activity is important in alleviating the health consequences of obesity even without weight loss, as it has been identified as one of the behaviors that make weight maintenance more likely.

The treatment of the eating disorders can be challenging. Drs. Mitchell and Cook Myers discuss the nonpharmacological therapy of bulimia nervosa (Chapter 2) and Dr. Hsu discusses the strategy for treatment of anorexia nervosa (Chapter 6). Dr. Hudson and his colleagues and Dr. Kaye review the research on the pharmacotherapy of bulimia nervosa (Chapter 3) and anorexia nervosa (Chapter 7). They provide their experiences and strategies for treatment.

Ultimately, we should be trying to prevent the development of eating disorders and if they occur, we should attempt early treatment before the conditions become refractory to treatment. Once we have successfully treated the patient, we need to prevent relapse. Dr. Rock (Chapter 4) discusses the effects of nutrition on the development of eating disorders and how modification of nutrition can assist in preventing the development of, improving the treatment of, and preventing relapse of eating disorders.

Dr. Marcus (Chapter 11) provides an overview of binge-eating disorder. This is a more recently defined diagnosis that has had increasing research interest since the first edition. Dr. Marcus reviews much of the research related to treatment of binge-eating disorder and places this into perspective.

Dr. Foreyt and colleagues (Chapter 12) look at the present status of obesity and look forward to how today’s needs may be met in the future. Part of the cause of obesity is the

underlying genetics of the individual that becomes permissive for weight gain in an environment of excess (5). As noted earlier, imprinting of the fetus and other environmental effects may also predispose individuals toward weight gain. These and other effects are discussed by Dr. Atkinson (Chapter 9).

Despite concerns about withdrawal from the market of obesity medications or greater regulatory restriction on obesity pharmacotherapy and despite possible increased stigmatization of obesity pharmacotherapy, two new obesity pharmacotherapies, orlistat and sibutramine, were approved for marketing in the United States, as is discussed by Dr. Bray (Chapter 16). New treatments continue to be explored and some of these have novel mechanisms that were not anticipated in 1999. Several of these may be approved for marketing during the next several years. Two that are anticipated in the near term are ciliary neurotrophic factor and rimonabant. In addition, some treatments are being used in combination with greater success than provided by individual agents, much as fenfluramine in combination with phentermine provided greater efficacy than did either agent individually (4,6). Drs. Atkinson and Uwaifo report on use of combination therapy in Chapter 17. Combinations of drugs are used in other branches of medicine to improve control of disease or to lower blood pressure, cholesterol, control diabetes, and so on. It is reasonable to believe that use of medications with different mechanisms of action could produce better weight control. This greater efficacy led to the popularity of the fen-phen combination for weight reduction and other combinations are in use at present. Such combinations have not been adequately studied in large controlled trials, but we should expect such studies in the future.

The genetics of obesity has been further elucidated since the first edition and Dr. Fernandez (Chapter 18) provides an update on these findings and how they might relate to future therapeutics. He also attempts to address the genetic perspective on the role of environment and how to use genetic tools to better understand the interaction of nature and nurture.

Surgical solutions for obesity have, on average, resulted in greater and more sustained weight loss than other treatments. Recognition of this has led to increased interest and utilization of this alternative. Surgical therapy continues to generate media interest. The surgical procedures continue to be refined and developed to maximize weight loss and minimize adverse consequences. Dr. Shikora (Chapter 20) discusses these surgical techniques and management of the post-surgery patient.

Weight loss can be attained with very low calorie diets, discussed by Dr. Phinney (Chapter 15), and by calorie restricted diets with modification of lifestyle and eating behaviors, discussed by Drs. Fabricatore and Wadden (Chapter 14). Very low calorie diets require special monitoring to avoid problems. Dr. Phinney discusses this management. After initial weight loss, postreduction maintenance strategies are critical to prevent regain of weight. Dr. Fabricatore and Wadden discuss strategies for weight maintenance.

The low carbohydrate diet, commercialized by Dr. Atkins, and its variants, including the South Beach Diet, have become very popular. Recent research has provided scientific information from randomized clinical trials about the effects of a low carbohydrate diet. Michael Penn and I have summarized this information and provide it in the context of the role of hunger and satiety in the management of obesity (Chapter 19). We provide a

hypothesis regarding the way the low carbohydrate diet may operate and note that we should expect that claims about diets and treatments should be tested scientifically.

A book on treatment would not be complete without covering the practical aspects of setting up and organizing the treatment practice. Drs. O'Neil and Rieder (Chapter 22) discuss the organization and use of a multidisciplinary program for treatment of obesity and Drs. Loper and Lutes (Chapter 21) discuss the practicalities of office practice and share their recent experience. Dr. Frank discusses the issues that prevent patients from achieving success in their effort to lose weight (Chapter 24). An enhanced understanding of these barriers to successful treatment will serve us well in our efforts to improve care of the obese patient.

The internet has provided access to information and treatment resources and potentially will provide a cost-effective adjunct to traditional therapy for patients with eating disorders and obesity. Internet resources are presented for eating disorders (Chapter 8) and obesity (Chapter 23). Although the use of the internet in therapy is very limited to date, we can expect the use of this medium to increase. It is hoped that providing this resource will benefit practitioners, particularly those in areas where consultant resources are limited. Although the Internal Revenue Service has just included the treatment of obesity as a tax deductible medical expense, it is still not covered by most health insurance policies and cost continues to be an issue. Indirect cost is also problematic in that intensive therapy is best and potentially entails missing work or obtaining child care. Use of the internet might alleviate some of this burden as well.

It is anticipated that incorporation of this information will enhance the effectiveness of practitioners in their management of patients with eating disorders and obesity.

I thank the Series Editor, Dr. Adrienne Bendich, Humana Press, and Paul Dolgert for their assistance in making this edition a reality. I also thank the chapter authors for their contributions.

David J. Goldstein, MD, PhD

REFERENCES

1. Connolly HM, Crary JL, McGoon MD, et al. Valvular heart disease associated with fenfluramine-phentermine. *N Engl J Med* 1997; 337:581–588.
2. Shekelle PG, Hardy ML, Morton SC, et al. Efficacy and safety of ephedra and ephedrine for weight loss and athletic performance. *J Am Med Assoc* 2003; 289: 1537–1545.
3. Bent S, Tiedt TN, Odden MC, Shlipak MG. The relative safety of ephedra compared with other herbal products. *Ann Intern Med* 2003; 138:468–471.
4. Weintraub M, Hasday JD, Mushlin AI, Lockwood D H. A double-blind clinical trial in weight control. Use of fenfluramine and phentermine alone and in combination. *Arch Intern Med* 1984; 144:1143–1148.
5. Kahn RC. The role of obesity in diabetes mellitus. *Curr Opin Endocrinol Diabet* 1996; 3:1–2.
6. Weintraub M. Long-term weight control study: conclusions. *Clin Pharmacol Ther* 1992; 51:642–646.