1. INTRODUCTION: NUTRITION AND THE EATING DISORDERS

This chapter reviews the issues related to the influences of dietary patterns and nutrition on eating disorders, the risk factors associated with the development of eating disorders, and suggestions for prevention and early intervention for the eating disorders (Table 1). Abnormal nutritional status and dietary patterns are the central features of the eating disorders. The objectives of this chapter are to provide the scientific background supporting this, the likely characteristics of at-risk individuals, and potential interventions.

In the pathogenesis of anorexia nervosa (see Chapter 5), nutritional factors are among both precipitating and perpetuating factors (1). Dieting or other purposeful changes in food choices triggers the onset of the disorder, and the physiological and psychological consequences of starvation serve as perpetuating factors that can impede progress toward recovery. Nutritional rehabilitation is the first goal of treatment (2), although other components of therapy are necessary to prevent relapse.

In the patient with bulimia nervosa (see Chapter 1), dieting appears to play a key etiologic role. The onset of bulimia nervosa typically follows a period of dieting to lose weight (3), and a causative link between dietary restraint and bulimia is strengthened by similar observations of obese patients who binge eat and of normal subjects following a period of food deprivation (4,5). The abnormal eating patterns that develop with repeated episodes of dieting and binge eating serve to perpetuate the disorder. The physiological consequences of these abnormal eating patterns contribute to its often intractable nature.

The clinical eating disorders are only the most extreme form of pathological eating attitudes and behaviors. Many engage in pathological dieting behaviors without meeting the current diagnostic criteria for anorexia or bulimia nervosa and may be regarded as having subclinical eating disorders. As described by Fairburn and Beglin (6), a broad spectrum of eating disorders appears to exist in the general population, as a continuum of dieting behavior and weight concerns, especially among women. The prevalence of anorexia nervosa and bulimia nervosa has been estimated at <1% and <3%, respectively (7,8). However, at least 30% of women of reproductive age have been shown to be...
practicing some pathological weight-control activities, with 15% regularly engaging in bulimic behaviors, including both binge eating and purging (9,10).

The link between nutritional patterns, unhealthful eating attitudes, and risk for eating disorders suggests that dietary behaviors and food cognitions may be a critical area of focus for preventive efforts (11), especially when targeted toward vulnerable patients and populations at high risk. Effective prevention or early intervention addresses nutritional issues because of the role of these factors in the development of eating disorders.

2. DIETING, DIETARY RESTRAINT, AND DISORDERED EATING PATTERNS

2.1. Dieting

In the United States, concern with body weight and dieting is so common that it may be considered normative behavior. In a cross-sectional Centers for Disease Control (CDC) survey (12), 39% of adult women and 25% of men reported that they were currently trying to lose weight. Notably, this proportion exceeds the prevalence of obesity in the population, and a substantial proportion of those who are dieting (particularly adolescents and young women) are not overweight. In this CDC survey, 40% of women aged 18–29 yr reported trying to lose weight and an additional 29% reported that they were trying to maintain weight (12). Individuals trying to either lose or maintain weight restrict their dietary intake: Chronic or intermittent dieting (vs exercise or other approaches to promote weight control) is the most common weight-control strategy utilized. Furthermore, approximately 25% of both men and women who are currently trying to lose weight can be defined as long-term dieters on the basis of long-term weight loss attempts. Dieting is also known to be as common among adolescents as adults, particularly in females (13,14).

Dieting behavior does not necessarily promote actual weight loss and, in fact, may even reduce the likelihood of this occurring. Most long-term dieters do not lose substantial amounts of weight (12). Instead, the result of dieting behavior is chronic, purposeful