



FIGURE 416-1 Algorithm for the treatment of obesity. This algorithm applies only to assessment for overweight and obesity and subsequent decisions based on that assessment. It does not reflect initial overall assessment for other conditions that the physician may wish to perform. BMI, body mass index; Hx, history. (From the National, Heart, Lung, and Blood Institute: *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults: The evidence report*. Washington, DC, US Department of Health and Human Services, 1998.)

Numerous randomized trials comparing diets of different macronutrient composition (e.g., low-carbohydrate, low-fat, Mediterranean) have shown that weight loss depends primarily on reduction of total caloric intake and adherence to the prescribed diet, not the specific proportions of carbohydrate, fat, and protein in the diet. The macronutrient composition will ultimately be determined by the

patient's taste preferences, cooking style, and culture. However, the patient's underlying medical problems are also important in guiding the recommended dietary composition. The dietary prescription will vary according to the patient's metabolic profile and risk factors. A consultation with a registered dietitian for medical nutrition therapy is particularly useful in considering patient preference and treatment of comorbid diseases.

Another dietary approach to consider is based on the concept of *energy density*, which refers to the number of calories (i.e., amount of energy) a food contains per unit of weight. People tend to ingest a constant volume of food regardless of caloric or macronutrient content. Adding water or fiber to a food decreases its energy density by increasing weight without affecting caloric content. Examples of foods with low-energy density include soups, fruits, vegetables, oatmeal, and lean meats. Dry foods and high-fat foods such as pretzels, cheese, egg yolks, potato chips, and red meat have a high-energy

TABLE 416-5 A GUIDE TO OPTING FOR TREATMENT FOR OBESITY

| Treatment | BMI Category (kg/m ²) | | | | |
|------------------------------------|-----------------------------------|--------------------|---------|--------------------|-----|
| | 25–26.9 | 27–29.9 | 30–34.9 | 35–39.9 | ≥40 |
| Diet, exercise, behavioral therapy | With comorbidities | With comorbidities | + | + | + |
| Pharmacotherapy | — | With comorbidities | + | + | + |
| Surgery | — | — | — | With comorbidities | + |

Source: From the National Heart, Lung, and Blood Institute, North American Association for the Study of Obesity (2000).