

**TABLE 3-1**  
**THE BEHAVE MODEL OF OBESITY TREATMENT:**  
**SIX PRINCIPLES FOR PROVIDERS**

Biological basis	The body's degree of adiposity falls under the control of the energy regulatory system, a complex network of neurohumoral pathways. This network can be modulated by genetic, developmental, environmental, and behavioral factors leading to the accumulation of excess adiposity (ie, overweight and obesity).
Education	Educating patients about the biological basis of their condition: Helps to reduce weight bias and patient blame Helps patients better understand their body's response to prior weight loss attempts Equips patients with the necessary background information to engage in the decision-making process regarding treatments
Heterogeneity	Given the complexity of the energy regulatory system and the many ways in which it may be modulated by genetic, developmental, environmental, and behavioral factors, it is not surprising that the population with overweight and obesity is physiologically, and therefore clinically, heterogeneous. Patients vary in their age of onset, weight distribution, hunger and satiety cues, cravings, metabolic rates, propensity to exercise, and response to sleep and stress as well as a host of other clinically measurable factors.
Assessment	Understanding that your patient population with obesity is clinically heterogeneous allows for a line of clinical questioning that will help you decipher subpopulations of patients. Through a more nuanced assessment, you may learn over time to tailor treatments to individual phenotypes.
Variability in response	Given physiologic heterogeneity in the patient population, there is generally a broad distribution of response to weight loss treatments, including diets, pharmacotherapy, and bariatric surgery. A single treatment does not suit all patients. However, for each treatment you are likely to find a subpopulation of high-responders.
Expectation	Upon trialing a treatment for obesity, if you expect variability in response among patients, you are less likely to blame the patient for noncompliance if the treatment is ineffective. You are also able to better manage patient expectations so that if the treatment is not resulting in substantial weight loss, the patient is prepared to move onto the next therapy, continues to follow up, and remains engaged in the therapeutic process.

etiologic role of behavior or environment. Rather, it places these factors in perspective. As in most other chronic diseases (eg, type 2 diabetes, cardiovascular disease, cancer), individual behavior and the external environment contribute to the disease state by working through the framework of an organism's physiology and disrupting its normal processes.