

- Increase the number of healthy snacks consumed. Choose bread, fruit, granola, and other nutritious foods.
- Consume complex carbohydrate (e.g., whole-wheat pasta, whole-grain bread, brown rice, potatoes) to get the majority of additional calories.
- Add resistance training to the daily routine. Weight training is an effective means for increasing fat-free mass.
- When training intensely, make sure each day to consume 1.5 g of protein for each kilogram of body weight.
- Increase consumption of milk and fruit juices. These excellent choices not only provide additional calories but also essential nutrients.

### KEY POINT

The additional calories needed to increase weight should come from increasing the number of healthy snacks or the size of meals. Adding resistance training to the exercise routine may help increase muscle mass.

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### LEARNING AIDS

#### REVIEW QUESTIONS

1. What is the current obesity prevalence for U.S. adults?
2. Define *positive caloric balance*. Does it lead to weight loss or weight gain?
3. What roles do genetic factors play in the development of obesity?
4. What three factors contribute to the daily caloric need?
5. What is the standard recommendation for daily caloric deficit when attempting weight loss?
6. Why is exercise important for those who are attempting weight loss or maintenance?
7. What are some behavioral strategies that can be useful for weight loss and maintenance?
8. List the signs of disordered eating.

#### CASE STUDIES

Ms. Kim is a 55-yr-old female who comes to your facility for an initial evaluation. She complains that she has gained 20 lb (9 kg) in the last 5 yr, and she wants to lose that extra weight. She is 5 ft 5 in. (165 cm) and weighs 160 lb (72.6 kg). She currently does not exercise and has a sedentary job.

1. Calculate her estimated daily energy requirements.
2. In order for her to lose approximately 1 lb (0.5 kg) a week, what calorie intake would you recommend?
3. Assume Ms. Kim begins a weekly exercise program in which she will walk (3.5 mph or 5.6 kph) for 30 min on 5 days per wk. How many additional calories will this expend each day? (Hint: See chapter 6.) Describe the effect this will have on weight loss.

#### Answers to Case Studies

1. Ms. Kim's estimated daily energy requirements are as follows:

$$\begin{aligned} \text{EER} &= 354 - 6.91(\text{age}) + \text{PA}[9.36(\text{weight}) + 726(\text{height})] \\ &= 354 - 6.91(55) + 1.12[9.36(72.7) + 726(1.65)] \\ &= 2,078 \text{ kcal} \cdot \text{day}^{-1}. \end{aligned}$$

2. Recommend 1,578 kcal · day<sup>-1</sup> (deficit of 500 kcal · day<sup>-1</sup>).
3. Approximately 4.5 kcal · min<sup>-1</sup> × 30 · min per day = 135 kcal · day<sup>-1</sup>.

If Ms. Kim engages in this activity 5 days per wk, that will add up to 675 kcal · wk<sup>-1</sup>, which will add an extra pound (0.5 kg) of weight loss every 5 wk.