

## Chapter 9 Reading guide

1. Define overweight, obese and underweight in terms of BMI.
2. Is BMI the “perfect” way to assess a person’s health based on their weight? Why or why not?
3. Why does fat distribution (rather than just total amount of excess fat) matter in terms of health?
4. Define appetite, hunger and satiety.
5. What is an ideal body composition range for men? For women? For each gender, what is considered obese?
6. What are some problems with having too little body fat?
7. Explain how waist circumference and waist-to-hip ratio can help you determine the health of your current weight/BMI.
8. List the different ways clinicians can measure body composition.
9. Discuss generally the many factors that can contribute to a person’s becoming obese. Focus on these details:
  - a. The many environmental factors
  - b. The role of genetics; you do not need to name specific genes EXCEPT the “thrifty gene.”
  - c. Explain how the “thrifty gene” might contribute to obesity; why was it beneficial in the past when food availability was less predictable or plentiful?
  - d. Name some hormones that are involved with triggering hunger and fullness. Might an imbalance with these hormones contribute to obesity somehow?
  - e. About what percent of obesity can be traced to thyroid problems?
  - f. Explain the role of the hypothalamus in triggering hunger and satiety.
  - g. When a person loses weight, does he/she lose many fat cells? Explain.
  - h. When is a person best able to make new fat cells? How does this relate to future weight maintenance?
  - i. What is the set point theory? Is it generally regarded as likely?
  - j. What is BMR? What are several factors that affect BMR? There is only one significant thing you can do to increase BMR; what is it?
  - k. What happens to BMR during restrictive diets? How does this affect a person’s ability to “keep the weight off?”
  - l. Explain the role of exercise in weight maintenance.
  - m. Describe trends in portion sizes over the past several decades. Does portion size actually influence how much people eat?
  - n. Does anyone know precisely what causes each person to become overweight/obese?
10. If you drank an extra can of soft drink every day (~140 calories) and made no other changes to diet/activity, how long would it take you to gain a pound? Explain.
11. What are “the two ways to lose weight?”

12. What are the major large muscle groups, and why is this question relevant to weight?
13. Design a weight-loss plan that is healthful, realistic, and designed to make sustainable long-term lifestyle changes. Explain each part of the plan.
14. List several drastic weight loss measures. Discuss risks for each. Are there circumstances when some might be appropriate?
15. Of the popular diets today, classify them in terms of: which seem to be most/least healthful; which seem most/least sustainable; which have the most/least research behind them (either supportive or refutive).
16. What are some tips for a person who is trying to gain weight? Why might exercise actually help a person gain weight?
17. What are some sources of “good fats” discussed by the text? Why is it important to REPLACE bad sources of fat with these good sources, and NOT to just ADD these good sources?
18. Discuss several eating disorders. What are some reasons people develop them?
19. What are some health risks caused by eating disorders?
20. Discuss several strategies for helping a friend/family member whom you suspect might have an eating disorder.

-From SciAm Frontiers’ “Losing It”-

21. What does Walter Willet of Harvard’s Nutrition department have to say about fats and carbohydrates?
22. Explain the link between the Pima Indians, obesity, and the “thrifty gene.”
23. Explain the procedure of gastric bypass. Had it worked for Amy and Rodney when this movie was shot?
24. In segment 5, what does Alan Alda have to say about what it took for him to lose weight?

No supplemental lecture!