Chapter 11
Nutrition for Physically-Active Lifestyle

1. What is the benefit of regular exercise?
2. What is the difference between structured and unstructured physical activity?
3. What is the popular method of estimating the intensity of exercise? What is the index value which indicates vigorous exercise?
4. What is the difference between aerobic exercise and resistance exercise?
5. What happens to most of the energy released from macronutrients? What happens to the portion of the macronutrient's energy which can be used by cells?
6. What is the difference between glucose catabolism under anaerobic and aerobic conditions?
7. What is ATP? Do cells store ATP?
8. What are the three major systems used by muscles cells to obtain energy? Which systems require oxygen?
9. How long can a resting muscle cell perform work using the muscle cell's stored ATP?
10. How long can a muscle cell perform work using creatine phosphate?
11. Converting pyruvate to lactic acid and then to lactate produces a small amount of energy. How long can this mechanism sustain vigorous physical exertion? What is the "waste" product of this mechanism and what is the effect on the muscle?
12. How is glucose metabolized when oxygen is available? What is the role of the cardiovascular and respiratory system?
13. When you are resting, do you use more glucose or fatty acids as a source of fuel? How does this relationship change for trained athletes? What is the net effect?
14. What are the two factors that influence athletic performance?
15. Athletes in training need to consume additional calories daily. What are good sources for these additional calories?
16. How is the energy consumption from nutrients different for non-athletes and athletes? What is the major cause of fatigue for endurance athletes?
17. Do athletes in training need to take protein or amino acid supplements? Why or why not? What happens to "extra protein"?
18. What is the difference between heat cramps, heat exhaustion, and heatstroke?
19. How much water do you need to loose during exercise before it is recommended that you "rehydrate" while exercising?
20. What is an ergogenic aid?
21. What are the components of a workout regimen?