NAME: Key

CHAPTER 5 WORKSHEET
NUTRITION AND SUPPLEMENTS

MATCHING—Match the following *vitamins* with the appropriate response.

D.	1. Vitamin A	A. Contributes to general good health; main vitamin derived from sunlight
E.	2. Vitamin B complex	B. Essential in energy metabolism of muscle and development of red blood cells
G.	3. Thiamine	C. Works with riboflavin and thiamin and enters into enzyme reactions
H.	4. Riboflavin	D. Essential for cell building; resists infections, prevents night blindness
C.	5. Niacin	E. Closely interrelated to and involved in various enzymatic actions
B.	6. Vitamin B12	F. Least stable of all vitamins; essential for repair and healing of wounds
F.	7. Vitamin C	G. Important for proper and complete utilization of carbohydrates
A.	8. Vitamin D	H. Essential to certain aspects of nerve tissue and cell respiration maintenance

MATCHING—Match the following *minerals* with the appropriate response.

C.	9. Potassium	A. Assists in formation of some amino acids
E.	10. Calcium	B. Regulates body's synthesis of hemoglobin
A.	11. Sulfur	C. Important for muscle contraction
F.	12. Phosphorus	D. Activates certain enzymatic reactions
B.	13. Iron	E. Important role in development of strong teeth and bones
D.	14. Manganese, copper and zinc	F. Important in the transport of fatty acid and energy metabolism

MATCHING—Match the following *nutrients* with the appropriate response.

D.	15. Carbohydrates	A. Utilized when carbohydrates are depleted
F.	16. Proteins	B. Organic compounds present in natural foods that act as regulators or catalysts
A.	17. Fats	C. Makes up approximately 75% of all protoplasm and is necessary for life
E.	18. Minerals	D. Organic compounds of carbon, hydrogen, oxygen; primary source of body fuels
B.	19. Vitamins	E. Necessary for proper maintenance of metabolic processes; potassium and calcium
C.	20. Water	F. Have building & repairing properties; help resist infection and aid healing

SHORT ANSWER

21. What two functions do food proteins (essential amino acids) perform? 1) growth, maintenance & repair of body tissues 2) Make enzymes, hormones & antibodies to fight infection

22. What is meant by "non-essential" amino acids? They're made by the body; don't need dietarily

23. List the *fat-soluble* vitamins. A, D, E, K

24. List the *water-soluble* vitamins. B Vitamins & Vitamin C

25. Describe the practice of *carbohydrate loading*. To ↑ glycogen stores in liver/skeletal muscle, athletes will ↓ training a few days @ competition and ↑ CHO intake the entire week @ the event. This is only valuable for long-duration events (e.g. marathons).

26. What is a significant concern that you should have if one of your athletes is a vegetarian? Deficiencies in protein and certain vitamins + minerals (eg. Fe)

List the guidelines to follow in establishing a pre-game meal.

27. Try to achieve largest possible CHO stores by eating a lot of CHO's
28. Eat foods ↓ lots of CHO's that leave the stomach quickly
29. Don't eat foods that may cause gastric upset (eg. beans, broccoli, dairy)
30. Consume low-fat liquids that don't act as laxatives & are easily absorbed
31. Don't eat new/disliked foods; understand the psych. role of foods

ESSAY • ↑ water intake

32. In what ways should diets differ between athletes and non-athletes and why?

Overall, athletes have a greater need for calories and increased water intake (sweating). The focus should be on high CHO diets (particularly those ↓ moderate to low glycemic indices). When protein is consumed is more important to athletes than how much; generally do not require more than the average person unless sport/event/training

33. If one of your athletes wanted to lose *fat* weight during the season, what guidelines would you give them to lose the weight sensibly/safely?

Advise them that losing more than 1-2 lbs/wk could be problematic. They should not decrease their caloric intake by more than 500-1000 C/day. Ensure they are adequately hydrating. They'll need to consume enough energy to maintain performance. Avoid using fad diet techniques as they can be expensive and potentially dangerous as many are based on little to no scientific/medical research/evidence. Help them to understand that body type/size/shape is genetically determined. So if they're dieting to achieve a particular shape/size, it may not be a realistic goal