Exam 1 Review

1. Consuming adequate carbs prevents breakdown of protein
2. Glycogen: liver and muscle
3. Carbs are transformed into glucose by the liver
4. After fasting, the brains uses ketones for fuel.
5. Insulin is responsible for lowering glucose. Glucagon frees up glucose.
6. Human digestion begins in the mouth.
7. After transport to the liver, glucose is stored as glycogen or stored as fat.
8. Essential nutrients – cannot be made in the body.
9. Primary function of protein is to provide the structural building blocks of the body.
10. Ecto: linear. Meso: muscular. Endo: adiposity.
11. Functions of saliva: breakdown carbs. Lysozymes to kill bacteria. Lubricate food for swallowing.
12. HCl and pepsin uncoil protein.
13. Liver, gall bladder and pancreas are accessory organs for digestion.
14. Plant proteins are deficient in one or more essential amino acids.
15. Aminos are required for ligaments, muscles and tendons.
16. Beans are rice make a complete protein meal.
17. To use amino acids as glucose or energy, they must be deanimated.
18. Glycolysis: breaks down carbs.
19. Body uses aminos to convert into neurotransmitters, glucose, and energy.
20. Excess aminos are deaminated, converted to ammonia and urea and exreted.
21. Whey is popular because it has all essential amino acids.
22. Anabolic: build. Catabolic: breaks down.
23. Prebiotic: food that bacteria thrive on, example is bananas and beans. Probiotic is the bacteria in food (like bacteria in yogurt).
24. After excessive carb intake: lipogenesis would be stimulated. (glycolysis is the breakdown of carbs, if there’s excessive carb intake then they will be stored – fat creation).
25. 100 amino acids – protein.
26. During exercise we are doing glycolysis and lipolysis.
27. Nitrogen distinguishes protein from carbs and fat.
28. High quality/complete protein has all essential amino acids in the proportion needed by the body.
29. For every pound of weight lost during an athletic event, you need 20-24 oz of water to replace it.
30. Ideal dose of protein per meal is 0.25 g protein/kg body weight (0.11 g protein/ls of body weight)
31. The most important strategy for protein synthesis is distributing adequate protein doses throughout the day.
32. Level 3 (Doubly indirect) body comp testing is the least accurate method of testing.
33. People need to consume high levels of sodium because only a small percentage of ingested sodium is absorbed. (False)
34. Sodium is the electrolyte with the greatest loss in sweat. 500 mg Na for every pound of sweat lost.
35. 24 hours to complete restore glycogen storages.
36. After a fat adaptation dietary protocol was followed; there was a short term increase in perceived effort, there was an impairment of the response to training when high-fat, low-carb eating continues for longer than 4 weeks, there was an increase in plasma norepinephrine concentrations and an increase in heart rate during sub maximal exercise.
37. Track athletes should not follow fat-adaptation protocols to minimize reliance on glycogen storages.
38. Absolute amounts of fat in humans are sufficient for many hours or days of continuous exercise even in the leanest athletes.
39. BCAAs: leucine, isoleucine, valine.
40. For an athlete to maximize muscle protein synthesis; daily protein range for an athlete is 0.6 to 0.8 grams/lb of body weight. 1.3-1.8 grams/kg.
41. Caffeine facilitates glycogen sparing with high doses.
42. Dehydration makes simpler tasks seem harder.
43. Aerobic glycolysis provides 95% of the potential ATP from glucose.