

Nutrition / Bio 1400
Carbohydrates (C4) Study Guide
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1. What percent should carbohydrates contribute to our daily calory intake?
2. What is the main fuel source for the nervous system and red blood cells?
3. How many calories per gram for carbohydrates?
4. How much and in what form are carbohydrates stored in the body?
5. How much glycogen is stored? Resting vs exercise? In hours?
6. What is photosynthesis?
7. What are the two carbohydrate polymers produced by plants?
8. What are the three common monosacharides? Dddisacharides?
9. How many Kcal are readily available in the body fluids (blood and interstitial fluid)?
10. How many Kcal are stored as glycogen in our bodies?
11. What are the two forms of dietary fibers and what are there distinctions?
12. What type of food lack carbohydrates?
13. What is the preferred source of carbodrydrates?
14. What is the difference between nutritive sweetners and alternative sweeteners?
15. What is the benchmark used to compare sweetness for all other sweeteners? Where does it come from? Its monosacharides?
16. How is HFCS made? Over the last 40 years, what has had a positive chorelation with the increas- ing use of HFCS?
17. Why is it not safe to feed infants honey?
18. What is sorbitol? Why do we use it?
19. Who determines the safety of alternative sweetneners? How is the amooount consumable posted?
20. What is aspartame?
21. How sweet is Splenda?

22. What was the first alternative sweetener developed?
23. Study Fig 4-8 / Digestion and Absorption / Know the Seven Steps
24. What is lactose intolerance?
25. What happened 600 yrs ago to make some people lactose tolerant?
26. How are glucose, galactose, and fructose moved from the lumen of the intestine into the absorptive cells of the small intestine?
27. What is the significance of protein sparing?
28. What causes ketosis and why is it dangerous?
29. Study Fig 4-9 / Blood Glucose Regulation
 - a. Normal range
 - b. result of too much glucose
 - c. result of too little glucose
 - d. role of insulin, glucagon, epinephrine
 - e. hypoglycemic vs hyperglycemic
30. What is the glycemic index?
31. What is the glycemic load?
32. What is the difference between diverticula and diverticulitis?
33. What are the benefits of a diet high in soluble (fermentable) fibers (e.g. oatmeal)?
34. How much carbohydrates do we need per day?
35. What is the daily value for fiber intake?
36. What foods do we need to eat to increase “good fiber” intake?
37. Is there a risk associated with eating too much fiber? Explain
38. What are the dangers associated with consuming too much sugar?
39. What is the irony surrounding low fat snacks?
40. What is the difference between type I and type II diabetes?
41. What conditions are associated with metabolic syndrome?