

Nutrition Study Guide

Chapter Four

Carbohydrates

- 1 What is the difference between whole grains and refined grains? Use these terms: bran, endosperm, and germ.
- 2 What is missing from “empty calories”?
- 3 What is the chemical structure of a carbohydrate? How are they used in our bodies?
- 4 What is the difference between starch, glycogen, glucose, fiber, disaccharides, polysaccharides, and monosaccharides?
- 5 Where is glycogen stored in a human body? Where is the single largest supply of glycogen? If you are running how long does it take to deplete the glycogen in your body? What then happens? Why?
- 6 What is the carbon cycle? What role do we play in this cycle?
- 7 What is the difference between soluble and insoluble fiber? Significance?
- 8 How are carbohydrates digested and transported into our tissues?
- 9 What is lactose? What is lactase? What is lactose intolerance?
- 10 What is the glycemic index?
- 11 How is blood carbohydrate regulated by insulin and glucagon? Why?
- 12 What is the difference between cellular respiration and lactic acid fermentation? (Related to glycolysis and Krebs cycle)
- 13 What are ketones? Ketoacidosis?
- 14 What does the word diabetes mean? How did ancient Greeks describe this condition?
- 15 What is the significance of these conditions: diabetes mellitus type I, DB type II, gestational diabetes, and diabetes insipidus?
- 16 What is the normal glucose blood range?
- 17 What are the physical conditions seen in diabetes mellitus?
- 18 What is the metabolic syndrome?
- 19 What is high fructose corn syrup? Good or bad?