

Carbohydrates

1. Introduction
2. Monosaccharides (Page 124)
 - A. Glucose
 - B. Fructose
 - i. High Fructose Corn Syrup
 - C. Galactose -
3. Disaccharides (Page 125)
 - A. Maltose
 - B. Sucrose
 - C. Lactose
 - i. Lactose Intolerance
4. Complex Carbohydrates (Page 129 - 103)
 - A. Energy Storage Vehicles
 - i. Starch
 - a. Energy - 4 kcal/gm
 - ii. Glycogen
 - a. Energy - 4 kcal/gm

Nutrition - Carbohydrates Outline

B. Plant Structure

i. Dietary Fiber

a. Forms of Fiber

- Soluble Fiber
- Insoluble Fiber

b. Benefits of Fiber

5. Carbohydrate Digestion (page 131 - 132)

Pull out handout on “Enzymatic Digestion of Starch”

A. Starch

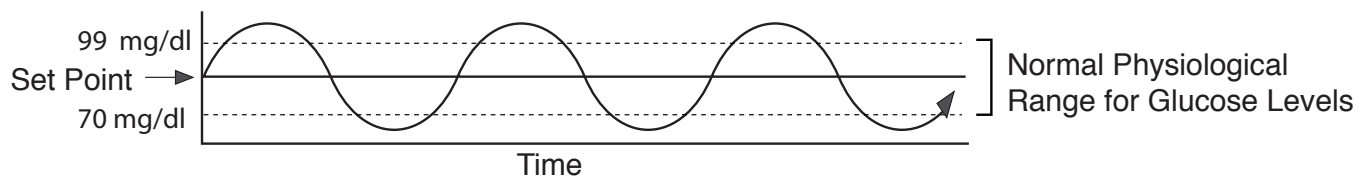
B. Sucrose

i. Dietary Fiber

C. Lactose

i. Lactose Digestion (See handout)

6. Blood Glucose Maintenance (page 133 - 134) -



Nutrition - Carbohydrates Outline

- A. Regulation (Pull out handout on Glucose Regulation)
- 7. Glucose for Energy (page 134)
- 8. Carbohydrates in Diet (page 135ff)
- 9. Carbohydrates and Weight Gain / Loss
 - A. Calorie Intake and Energy Expenditures
 - B. Glucose Regulation and Weight
- 10. Energy Associated Diseases (Page 138 ff)
 - A. Diabetes Mellitus
 - i. Hyperglycemia
 - ii. Glucose Levels
 - a. Normal - 70 mg/dl
 - b. Prediabetes - 100 - 125 mg/dl
 - c. Diabetes - 126 or more

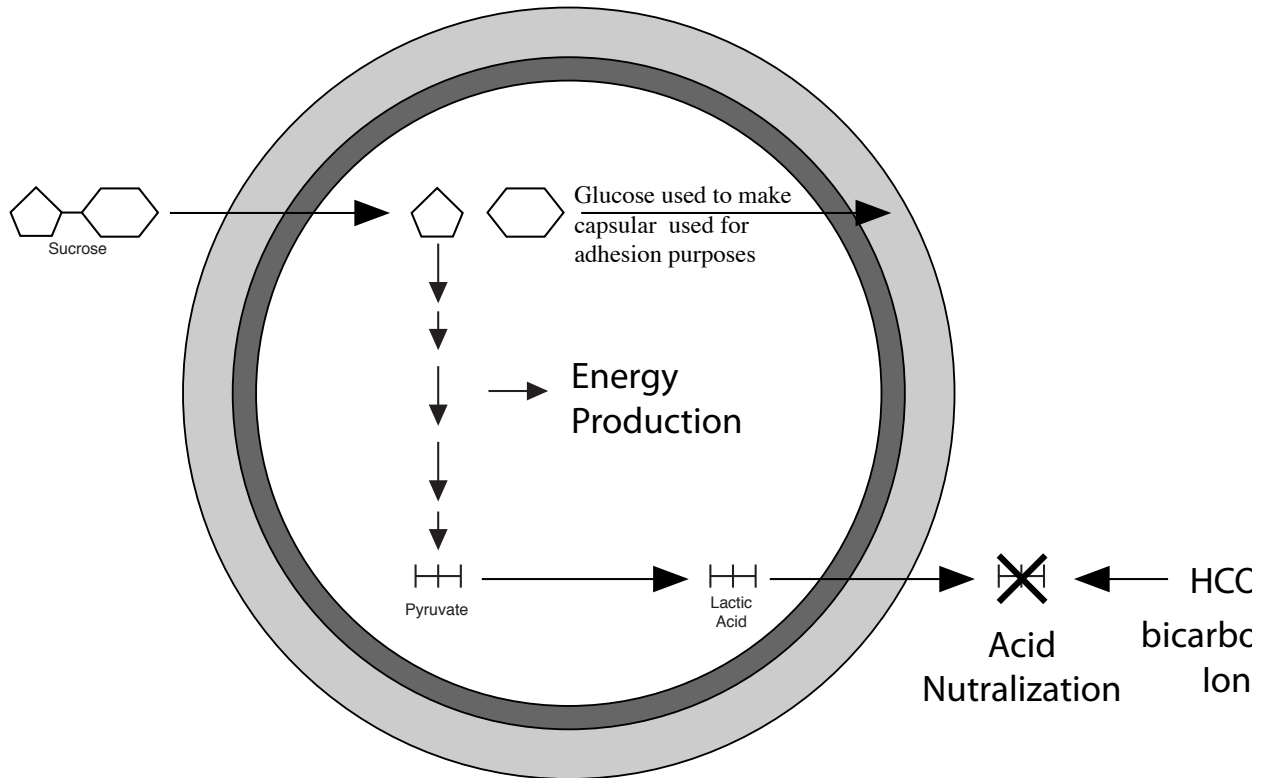
Nutrition - Carbohydrates Outline

- iii. Diabetes Type 1 -
- iv. Diabetes Type 2
- v. American Diabetes Association - <http://www.diabetes.org>
- vi. Control of Diabetes
 - a. Diet
 - b. Exercise
 - c. Medication -
- vii. Prevention of Diabetes
 - Type 2 however:
 - a. Weight Lose
 - b. Exercise

B. Hypoglycemia (Page 141)

- i. Hypoglycemia
- ii. Glucose Levels
 - a. Normal - 70 mg/dl
 - b. Abnormal - less than 70 mg/dl
- iii. Reactive Hypoglycemia

C. Gingivitis and Dental Carries (Page 142)



C. Lactose Intolerance (Page 143)

Nutrition - Carbohydrates Outline

11. Dietary Fiber (Page 144 - 146)

- AI for Fiber is 38 g/day - men; 25 g/day women

- A. Fiber and Health
- B. Relationship between Fiber and Diverticulitis
- C. Fiber is Cholesterol
- D. Fiber and Weight

Nutrition - Carbohydrates Outline

Nutrition Facts			
Serving Size 8.2 oz. (35g/ about 1/4 box) (Makes about 1/2 cup)			
Servings Per Container about 4			
<hr/>			
Amount Per Serving			
Calories 625			
Calories from Fat 140			
<hr/>			
% Daily Value			
Total Fat	25 g	23%	
Saturated Fat	10 g	46%	
Cholesterol	32mg	20%	
Sodium	540 mg	55%	
Total Carbohydrate	40 g	12 %	
Dietary Fiber	3g	5%	
Sugars	6g		
Protein	20 g		
<hr/>			
Vitamin A		10%	
Vitamin C		2%	
Calcium		8%	
Iron		2%	
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower, depending on your calorie needs:			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

INGREDIENTS: Rice flour, chicken liver, salt, molasses, Calcium propionate (preservative), Lecithin