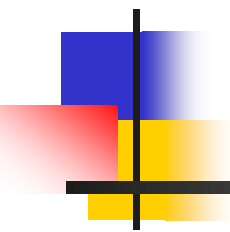


# How Does Food Impact Your Diabetes?



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# Nutrient Categories

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- Carbohydrates
  - Starch
  - Fruit
  - Milk
  - Other Carbohydrates
- Meat / Meat Substitutes
- Fats
- Free Vegetables



# Foods We Eat

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- Carbohydrates

- Most important in managing diabetes and keeping glucose levels in normal range.
- Do not avoid!

- Meats and Fats

- Slows absorption.
- When eaten in excess digestion is delayed therefore keeping glucose elevated for a longer period of time.



# Carbohydrate Choices

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- **Each portion = 1 fat choice**
- **Starches**
  - Pasta and rice - 1/3 cup cooked
  - Cereal - 1/4 - 1 cup - read label
  - Bread - 1 slice whole grain/whole wheat, 1/2 English muffin, 1/4 bagel, 1/2 sandwich bun
  - Starchy vegetables - small (3oz.) potato, 1/2 cup corn or peas or dried beans, 1/3 cup baked beans
  - Miscellaneous – 3 cups low fat popcorn, 15 mini pretzels, 4 – 6 crackers - read label



# Carbohydrate Choices

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## ■ Fruits

- 1 small piece - size of tennis ball
- 1/3 – 1/2 cup juice
- 1/2 cup grapes
- 1/2 cup light canned fruit or unsweetened applesauce
- 1 cup berries or melon
- 1 small (4oz.) banana or 1/2 medium banana



# Carbohydrate Choices

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- Milk
  - 1 cup fat free or 1% milk
  - 6 – 8 oz. light yogurt



# Carbohydrate Choices

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- Sweets and other carbohydrates
  - 2 X 2 inch piece of cake or brownie, no icing
  - 2 small cookies
  - 1/2 cup ice cream
  - 1/2 cup sugar free pudding
  - 1/2 cup spaghetti or pasta sauce
  - 1 cup soup



# Carbohydrate Choices

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- Sweets and other carbohydrates
  - 3 X 4 inch piece of lasagna = 2 carb choices + 2 meat choices
  - 6 inch sub = 3 carb choices + 3 meat choices
  - 1/8 of medium pizza = 2 carb choices + 2 meat choices
  - 1 cup chili or casserole = 2 carb choices + 2 meat choices



# Meat / Meat Substitute Choices

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- **Meat 1 oz. = 1 meat choice**
  - Lean beef, fish, poultry, pork
- **Meat Substitute each portion = 1 meat choice**
  - Cheese – 1 oz. = 1 slice
  - Cottage cheese – ¼ cup
  - Eggs – 1 – limit to 3 per week
  - Peanut butter – 1 Tbsp.



# Fat Choices

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- **Each portion = 1 fat choice**
- Monounsaturated
  - Olive and canola oil– 1 tsp.
  - Nuts – 6 - 10
- Polyunsaturated
  - Margarine and mayonnaise – 1 tsp.; reduced fat mayo - 1 Tbsp.
  - Salad dressing – 1 Tbsp.; reduced fat – 2 Tbsp.



# Fat Choices

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- Saturated - unhealthy
  - Bacon – 1 slice
  - Cream cheese - 1 Tbsp.; reduced fat – 2 Tbsp.
  - Sour cream – 2 Tbsp.; reduced fat – 3 Tbsp.
  - Cream – half and half – 2 Tbsp.



# Free Foods

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- Sugar free gelatin
- Non-starchy vegetables
  - All vegetables except potatoes, corn , peas, winter squash, dry and baked beans



# Reading Nutrition Labels

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- Serving size – varies for each product
- Dietary fiber – if 5 grams or greater, subtract from the total carbohydrates then refer to chart for gram to carbohydrate choice conversion
- Total carbohydrates – measured in grams, refer to chart for gram to carbohydrate choice conversion

## Nutrition Facts

Serving Size 3/4 Cup (29g/1.1 oz.)  
Servings per Container About 17

Amount Per Serving	Cereal with 1/2 Cup Vitamins A & D	
	Cereal	Skim Milk
<b>Calories</b>	90	130
Calories from Fat	5	5
	<b>% Daily Value **</b>	
<b>Total Fat</b> 0.5g*	1 %	1 %
Saturated Fat 0g	0 %	0 %
Polyunsaturated Fat 0g		
Monounsaturated Fat 0g		
<b>Cholesterol</b> 0mg	0 %	0 %
<b>Sodium</b> 230mg	10 %	12 %
<b>Potassium</b> 170mg	5 %	11 %
<b>Total Carbohydrate</b> 24g	8 %	10 %
Dietary Fiber 5g	20 %	20 %
Soluble Fiber 0g		
Insoluble Fiber 5g		
Sugars 5g		
Other Carbohydrate 14g		
<b>Protein</b> 3g		
Vitamin A	25 %	30 %
10% DV as beta carotene		
Vitamin C	25 %	25 %
Calcium	0 %	15 %
Iron	45 %	45 %
Vitamin D	10 %	25 %
Vitamin E	25 %	25 %
Thiamin	25 %	30 %
Riboflavin	25 %	35 %
Niacin	25 %	25 %
Vitamin B <sub>6</sub>	25 %	25 %
Folate	25 %	25 %
Vitamin B <sub>12</sub>	25 %	35 %
Phosphorus	15 %	25 %
Magnesium	15 %	20 %
Zinc	25 %	30 %
Copper	6 %	8 %

\*Amount in cereal. One half cup of skim milk contributes an additional 65mg sodium, 6g total carbohydrate (6g sugars), and 4g protein.

\*\*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
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4

**Ingredients:** Whole wheat, wheat bran, sugar, high fructose corn syrup, salt, malt flavoring.  
**Vitamins and Minerals:** ascorbic acid (vitamin C), reduced iron, alpha tocopherol acetate (vitamin E), niacinamide, zinc oxide, pyridoxine hydrochloride (vitamin B<sub>6</sub>), vitamin A palmitate and beta carotene (vitamin A), riboflavin (vitamin B<sub>2</sub>), thiamin hydrochloride (vitamin B<sub>1</sub>), folic acid, vitamin B<sub>12</sub>, and vitamin D.

may reduce the risk of heart disease.

## Nutrition Facts

Serving Size 1 cup (30g)  
Servings Per Container About 14

Amount Per Serving	with 1/2 cup skim milk	
	Cheerios	
<b>Calories</b>	110	150
Calories from Fat	15	20
	<b>% Daily Value**</b>	
<b>Total Fat</b> 2g*	3 %	3 %
Saturated Fat 0g	0 %	3 %
Polyunsaturated Fat 0.5g		
Monounsaturated Fat 0.5g		
<b>Cholesterol</b> 0mg	0 %	1 %
<b>Sodium</b> 280mg	12 %	15 %
<b>Potassium</b> 95mg	3 %	9 %
<b>Total Carbohydrate</b> 22g	7 %	9 %
Dietary Fiber 3g	11 %	11 %
Soluble Fiber 1g		
Sugars 1g		
Other Carbohydrate 18g		
<b>Protein</b> 3g		
Vitamin A	25 %	30 %
Vitamin C	25 %	25 %
Calcium	4 %	20 %
Iron	45 %	45 %
Vitamin D	10 %	25 %
Thiamin	25 %	30 %
Riboflavin	25 %	35 %
Niacin	25 %	25 %
Vitamin B <sub>6</sub>	25 %	25 %
Folic Acid	25 %	25 %
Phosphorus	10 %	25 %
Magnesium	8 %	10 %
Zinc	25 %	30 %
Copper	2 %	2 %

\*Amount in Cereal. A serving of cereal plus skim milk provides 2g fat (0.5g saturated fat, 1g monounsaturated fat), less than 5mg cholesterol, 350mg sodium, 300mg potassium, 28g carbohydrate (7g sugars) and 7g protein.

\*\*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
Potassium		3,500mg	3,500mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

**INGREDIENTS:** WHOLE GRAIN OATS (INCLUDES THE OAT BRAN), MODIFIED FOOD STARCH, WHEAT STARCH, SUGAR, SALT, OAT FIBER, TRISODIUM PHOSPHATE, CALCIUM CARBONATE, VITAMIN E (MIXED TOCOPHEROLS) ADDED TO PRESERVE FRESHNESS.

**VITAMINS AND MINERALS:** VITAMIN C (SODIUM ASCORBATE), IRON AND ZINC (MINERAL NUTRIENTS), A B VITAMIN (NIACIN), VITAMIN A (PALMITATE), VITAMIN B<sub>6</sub> (PYRIDOXINE HYDROCHLORIDE), VITAMIN B<sub>2</sub> (RIBOFLAVIN), VITAMIN B<sub>1</sub> (THIAMIN MONONITRATE), A B VITAMIN (FOLIC ACID), VITAMIN D.

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# Conversion Chart

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## Grams of Carbohydrates

0 – 5

6 – 10

11 – 20

21 – 25

26 – 35

36 – 40

41 – 50

51 – 55

56 – 65

66 – 70

71 – 80

81 – 85

86 – 95

## Carbohydrate Choices

do not count

½ carbohydrate choice

1 carbohydrate choice

1½ carbohydrate choices

2 carbohydrate choices

2½ carbohydrate choices

3 carbohydrate choices

3½ carbohydrate choices

4 carbohydrate choices

4½ carbohydrate choices

5 carbohydrate choices

5½ carbohydrate choices

6 carbohydrate choices



# How Much Should You Eat?

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- Women

- 3 – 4 carbohydrate choices at each meal
- 3 meat choices at lunch and dinner
- 1 –2 fat choices at each meal
- 1 carbohydrate choice as evening snack

- Men

- 4 – 5 carbohydrate choices at each meal
- 4 meat choices at lunch and dinner
- 1 –2 fat choices at each meal
- 1 carbohydrate choice as evening snack



# MEALS – You Tell Me

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- 4 oz. grilled chicken, 6 oz. sweet potato, ½ cup unsweetened applesauce + salad with 2 Tbsp. dressing
  - How many carbohydrate choices?
  - How many meat choices?
  - How many fat choices?
  - How does it affect blood glucose?
  - Does the meal fit into your plan?



# MEALS – You Tell Me

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- 3 X 4 inch piece of lasagna + 1 small dinner roll + salad with 2 Tbsp. dressing
  - How many carbohydrate choices?
  - How many meat choices?
  - How many fat choices?
  - How does it affect blood glucose?
  - Does the meal fit into your plan?



# MEALS – You Tell Me

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- McDonald's, quarter pounder with cheese + medium fries
  - How many carbohydrate choices?
  - How many meat choices?
  - How many fat choices?
  - How does it affect blood glucose?
  - Does the meal fit into your plan?



# MEALS – You Tell Me

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- 2 pieces thick crust cheese, pepperoni and mushroom pizza
  - How many carbohydrate choices?
  - How many meat choices?
  - How many fat choices?
  - How does it affect blood glucose?
  - Does the meal fit into your plan?



# MEALS – You Tell Me

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- Chinese, 1 cup Wonton soup + 1 medium egg roll + 1/2 restaurant serving of General Tso chicken
  - How many carbohydrate choices?
  - How many meat choices?
  - How many fat choices?
  - How does it affect blood glucose?
  - Does the meal fit into your plan?



# MEALS – You Tell Me

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- 1 cup of wedding soup + 6 Saltine crackers
  - How many carbohydrate choices?
  - How many meat choices?
  - How many fat choices?
  - How does it affect blood glucose?
  - Does the meal fit into your plan?



# Appointments

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LuAnn Berry

Registered dietitian and certified  
diabetes educator

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