



Food for Thought

Finding the Right Balance with Healthy Eating

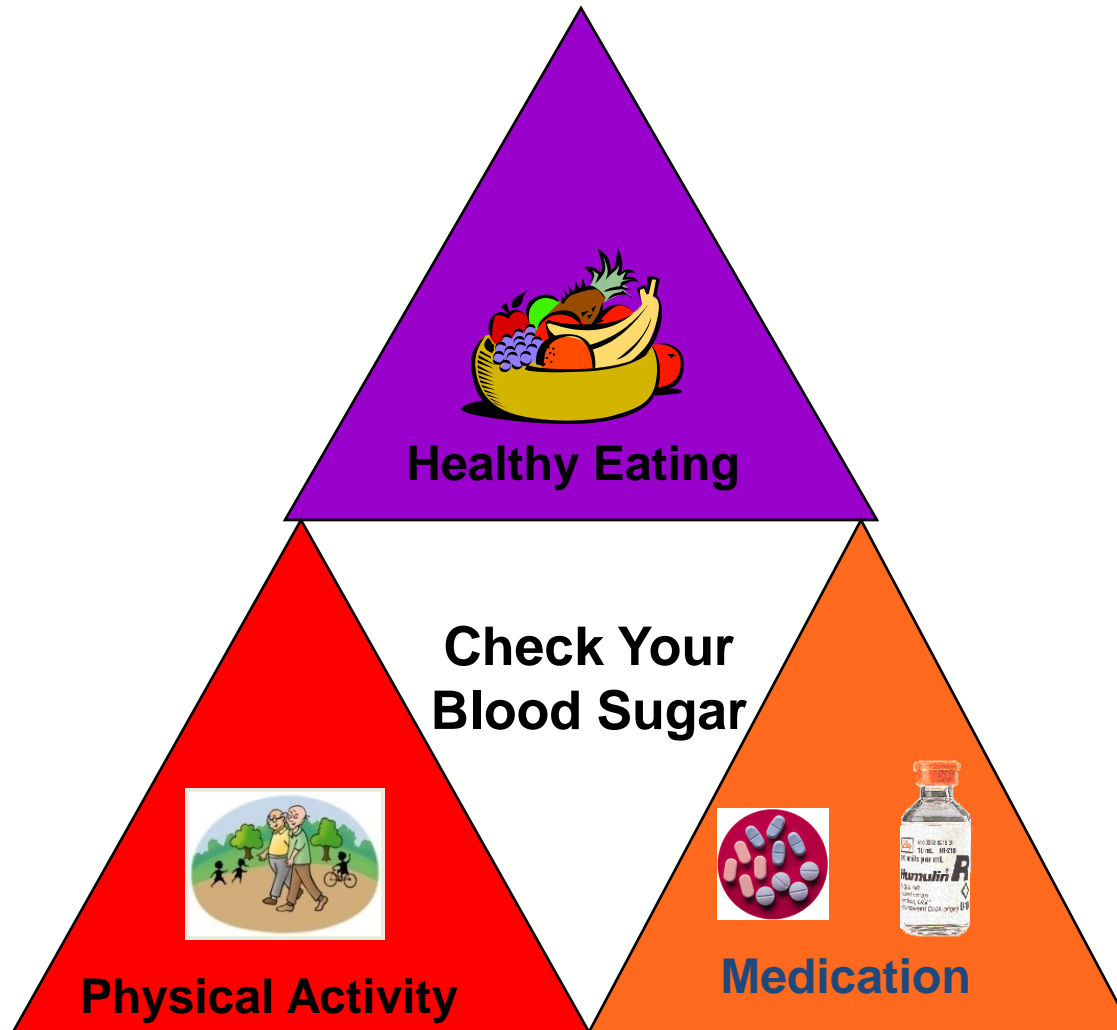
Adapted for Upstate Medical University by:
Kristi Shaver, BS, RN, CDE, MS-CNS Student (2014)
January 2014

Why is Healthy Eating Important?

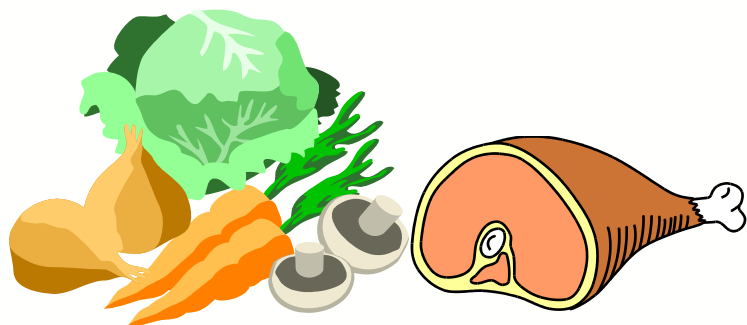
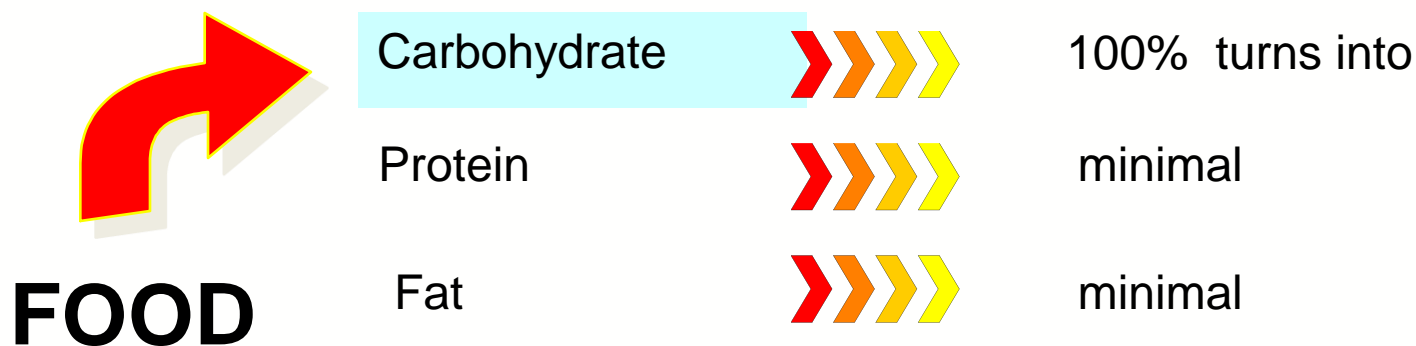
- Blood sugar control
- Reduces risks of complications
 - Heart disease
 - Kidney disease
- Weight control
- Good health



Caring for Your Diabetes



How Foods Affect Your Blood Sugar



**BLOOD
SUGAR**



Why Does Carbohydrate Elevate Blood Glucose Quickly?

Fat 4 - 6 hrs.

Protein 2 - 4 hrs.

Carb 1 - 2 hrs.



Why Eat Carbohydrate?

- Fuel for physical activity
- Fuel to run our organs
- Source of vitamins, minerals, fiber
- Helps muscles



What Foods Have Carbohydrate?

- ***Grains*** – rice, oats, wheat, barley
- ***Fruit & fruit juice***
- ***Milk & yogurt***
- ***Vegetables***
- ***Legumes*** – beans, peas
- **Desserts & Snack Foods**



How much carb should I eat?

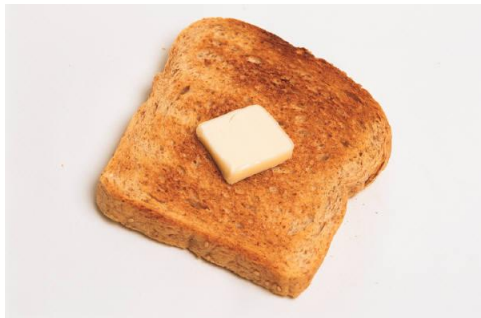
- Different for everyone
- Depends on:
 - Activity level
 - Weight goal
 - Gender
 - Diabetes medications
 - Blood glucose goals



Carbohydrate Equivalents

1 carbohydrate equivalent=15 grams

Breads/Grains



**1 slice whole
grain bread**

Fruit



**Small
fresh fruit**

Milk



**8 oz
lowfat
milk**

Other Carbs



**1 med Choc
chip cookie**

Total Carbohydrates =
Total Effect on the Blood
 Sugar

Serving
 Size
 1 cup

Total
 Carbs
 36 grams

Whole Grain Cereal

Nutrition Facts

Serving Size: 1 cup (53g/1.9 oz.)
 Servings Per Container: About 8

Amount Per Serving

Calories 190	Calories from Fat 25
% Daily Value**	
Total Fat 3g*	5%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 95mg	4%
Potassium 300mg	9%
Total Carbohydrate 36g	12%
Dietary Fiber 8g	32%
Soluble Fiber 3g	
Insoluble Fiber 5g	
Sugars 13g	
Protein 9g	14%

Vitamin A 0%	•	Vitamin C 0%
Calcium 4%	•	Iron 10%
Phosphorus 10%	•	Magnesium 10%
Copper 8%		

* Amount in Cereal. One half cup of fat free milk contributes an additional 40 calories, 85mg sodium, 6g total carbohydrates (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
Protein		50g	65g

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

INGREDIENTS: Soy Grits, Hard Red Winter Wheat, Long Grain Brown Rice, Whole Grain Oats, Barley, Rye, Buckwheat, Sesame Seeds, Evaporated Cane Juice Syrup, Corn Meal, Corn Flour, Soy Protein, Wheat Bran, Oat Flour, Corn Bran, Honey, Natural Flavors, Calcium Carbonate, Salt

CONTAINS SOYBEAN AND WHEAT INGREDIENTS

The History of Dinner Plate Sizes Corresponds to the Increase in Obesity



Supersizing!

Bagel

20 Years Ago



Today



Important Points...

- Find balance
- Count your carbohydrate grams
- It's not about following a "Special Diet". Follow your meal plan; if it doesn't work it can be changed
- Even a small sweet treat now & then can work into a meal plan




True or False

Being active is
important for blood
sugar control...



Physical activity makes you healthier

- 
- Helps with weight control
 - Increases your strength
 - Improves blood glucose control/A1C
 - Helps medications work better
 - Helps with blood pressure/cholesterol
 - Reduces risk of chronic disease
 - Makes you feel better
 - Reduces depression

How does physical activity affect blood glucose?

Exercise helps insulin work



What keeps you from being physically active?

- Time/work
- Not sure what to do
- Lack of support
- Medical problems
- Weather
- Feeling lazy
- Dislike exercise



Possible Solutions

- Find activities you enjoy
- Set small, reachable goals
- Exercise with family or friends
- Buy a new pair of shoes
- Plan your workouts in your calendar
- Other ...



Plan YOUR path to fitness!

Stay F.I.T.T.

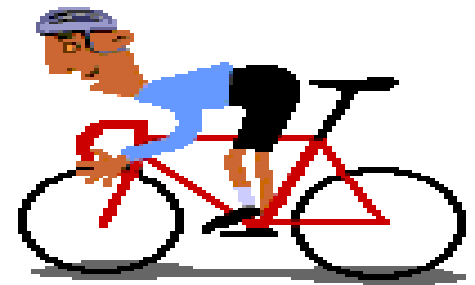
- **Frequency**
 - How often?
- **Intensity**
 - How long or hard?
- **Type**
 - What kind of activity?
- **Time**
 - When will you exercise?





What type of activity?

- **Aerobic Exercise:**
Walking, biking, swimming,
hiking, dancing, jogging
- **Aerobic Machines:**
Elliptical, stationary bike,
rowing, arm bike



How Often & How Long?

Fitness & Diabetes	Weight Loss & Maintenance
5 days/Wk	6-7 days/Wk
30 Minutes	60-90 Minutes

- Perform multiple bouts of minimum 10 mins exercise
- Start slowly and build up
- Talk Test



How Hard?

- Follow the “Talk Test”
 - If you can sing or whistle while doing the activity, you are active at a light intensity
 - If you are able to carry on a conversation comfortably while engaging in the activity, you are active at a moderate intensity
 - If you become winded or too out of breath to carry on a conversation, the activity can be considered vigorous

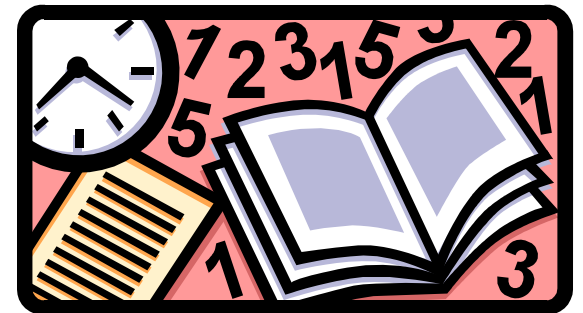


What Time of Day?

Any time that fits into your:

- Daily activities
- Lifestyle
- Diabetes treatment plan

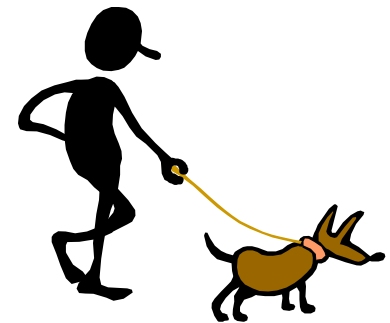
Plan ahead



Be More Active!

- Use stairs
- Walk, don't drive
- Get on or off the bus a stop earlier
- Do your own gardening
- Walk your dog
- Go dancing
- Wear a pedometer

Pedometers are fun!



Watch for low blood glucose with these medications!

- Insulin & Injectables
- Diabetes Pills:
 - Diabeta, Micronase, Glynase, Glucovance, Glyburide, Glipizide
 - Glucotrol, Glucotrol XL, Metaglip
 - Amaryl
 - Prandin
 - Starlix





Prevent Low Blood Glucose

- Check blood glucose before and after activity with a goal to be:
 - Diabetes pills: **over 100 mg/dl**
 - Insulin: **over 150 mg/dl**
- Treat if your blood glucose is lower than goal
- Unplanned exercise
 - 30mins- take 15g of carbs
 - 60mins - take 15g of carbs + 7-8g of protein

Eating for 30 minutes of exercise

15 grams of Carbohydrate

- 3 graham crackers
- 6 saltines
- 3 ginger snaps
- 2 rice cakes
- 3 cups plain popcorn
- small apple
- 15 grapes
- small orange
- 2 Tbsp. raisins
- medium peach

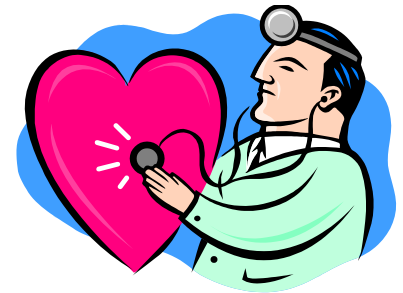


When NOT to exercise

- If you are not feeling well and...
- Type 2 diabetes- blood glucose higher than 400 mg/dl
- Type 1 diabetes- If blood glucose higher than 250 mg/dl, test for ketones:
 - If positive for ketones, NO EXERCISE
 - If negative for ketones:
 - If less than 300 okay to exercise
 - If greater than 300 exercise WITH CAUTION

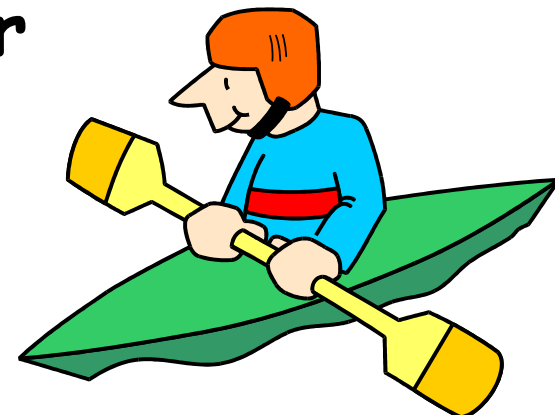
Special Considerations

- High blood pressure
- Retinopathy
- Nephropathy
- Neuropathy
- Cardiovascular
- Musculoskeletal



Exercise safely!

- Check your blood glucose
- Know when you should NOT exercise
- Be prepared - clothes, shoes, supplies, identification, etc.
- Know what to ask your provider about your health



**“It is better to discuss
how far you have
walked than how little
you have eaten”**

Dr. Elliott P. Joslin, 1924

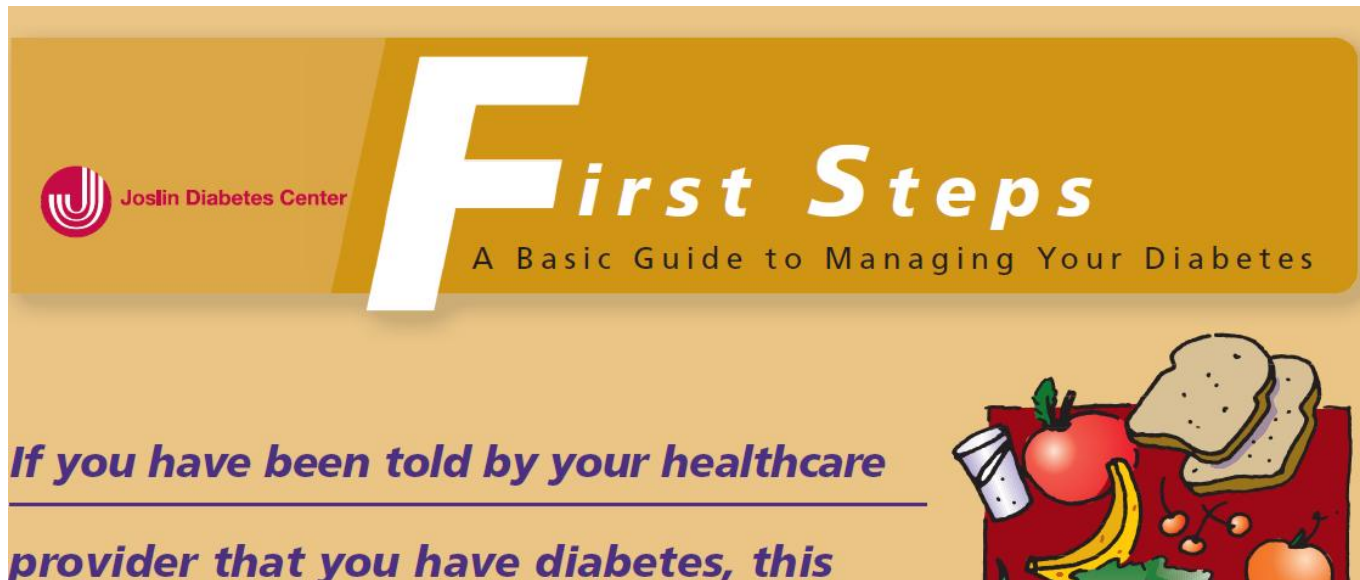
Go to the Patient Education link on the internal Upstate website



Select the Diabetes/Joslin Adult category



Check out all the great education materials!



The banner features the Joslin Diabetes Center logo on the left, followed by the title "First Steps" in a large, white, serif font. Below the title is the subtitle "A Basic Guide to Managing Your Diabetes" in a smaller, white, sans-serif font. At the bottom left, there is a line of text: "If you have been told by your healthcare provider that you have diabetes, this". To the right of this text is a colorful illustration of various food items including a sandwich, a banana, an apple, and other fruits.

Online Diabetes Resources to Learn More:

1. **National Diabetes Education Program** 1-888-693-NDEP (1-888-693-6337) www.YourDiabetesInfo.org
2. **Diabetes HealthSense**: An online library of resources for living well. www.YourDiabetesInfo.org/HealthSense
3. **Academy of Nutrition and Dietetics** 1-800-877-1600 www.eatright.org
4. **American Association of Diabetes Educators** 1-800-338-3633 www.diabeteseducator.org
5. **American Diabetes Association** 1-800-DIABETES (1-800-342-2383) www.diabetes.org
6. **American Heart Association** 1-800-AHA-USA1 (1-800-242-8721) www.americanheart.org
7. **Centers for Disease Control and Prevention** 1-800-CDC-INFO (1-800-232-4636) www.cdc.gov/diabetes
8. **Centers for Medicare & Medicaid Services** 1-800-MEDICARE (1-800-633-4227) www.medicare.gov
9. **JDRF** 1-800-533-CURE (1-800-533-2873) www.jdrf.org