

# Diabetes

## Life Lines



December 2017-January 2018

- **Diabetes - the Medical Perspective**
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### **Diabetes - the Medical Perspective**

#### **Understanding Insulin**

Your healthcare team will develop a plan to help manage your diabetes. This will likely include changes to your eating plan, physical activity, and medications. Even if insulin is not a part of your care plan, it is important to understand its role, as diabetes is a progressive disease with ever changing strategies for management.

Insulin is a hormone produced by the pancreas that keeps blood sugar within normal ranges in the blood stream. Insulin moves the sugar (glucose) from the blood stream into the cells to nourish the body. Everyone with type 1 diabetes requires insulin injections because their body produces little or no insulin. Some with type 1 diabetes go through a period referred to as a “honeymoon phase” shortly after diagnosis, where the pancreas may still produce a small amount of insulin. This phase can last weeks or

months, but is temporary, resulting in the need for insulin injections.

The following are common assumptions made about insulin that are not accurate:

***If I have to take insulin, I must be a failure.***

It is not uncommon for those with type 2 diabetes to eventually need insulin because diabetes is a progressive disease. Few people with type 2 diabetes start out taking insulin, but about one in three will end up taking insulin. The necessity for insulin injections should never be viewed as a failure.

***Taking insulin means my diabetes is somehow more serious.***

Insulin is a natural way to keep your diabetes well managed and prevent diabetes related complications. It is most important to manage diabetes with the best medical therapy available.

***Insulin injections are painful.***

Most of us do not relish the thought of having to take daily injections. Insulin is injected into the fat right beneath the skin where there are few nerve endings. The pen needles and insulin syringes of today

are so thin that most people report little to no discomfort.

***I will never be able to give myself a shot.***

Young and old alike can be taught how to administer an insulin injection. Special adaptive devices are available for those with poor dexterity, vision issues, or fear of needles.

***I will gain weight on insulin.***

Taking insulin can make weight loss more difficult, although decreasing caloric intake and increasing physical activity play the greatest role in weight status. If you do gain weight, talk to your dietitian and health care provider about making sure the meal plan and insulin plan are the best for you.

***If I agree to start insulin, it will be forever.***

Anyone with type 1 diabetes will have to take insulin forever. For others, it depends on how long you have had diabetes and how much insulin your pancreas is able to secrete. Many with type 2 diabetes can reduce or eliminate the need for insulin with the adoption of healthy lifestyle behaviors, like weight loss and increased physical activity. Newly developed diabetes medications can sometimes replace insulin.

***Insulin will cause low blood sugar.***

Low blood sugar (hypoglycemia) can happen with insulin; however, careful dosing, monitoring and meal planning makes hypoglycemia less common. The

use of long-acting insulins has lessened hypoglycemia occurrences because these insulins do not peak like regular and fast-acting insulin.

## **Diabetes and Food**

No matter what medication is prescribed for diabetes management, a healthy eating plan is an important part of the treatment plan. Healthy meals are a balance of lean protein, fruits, vegetables, whole grains, fat-free or low-fat dairy products, and healthy fats.

Eating regularly scheduled meals and snacks, as appropriate, will maintain blood glucose control. When taking insulin and some oral medications that can cause hypoglycemia (low blood sugar), it is especially important not to skip meals and to monitor your blood sugar before periods of physical activity.

Blood glucose readings below 70 mg/dl are hypoglycemia and should be treated with a fast acting carbohydrate. The only way to be sure you are experiencing hypoglycemia is to check your blood glucose level at the time symptoms occur. Common hypoglycemia symptoms include a rapid heart rate, shakiness, chills, sweating, anxiety, lightheadedness and dizziness. The lower the blood sugar reading, the more pronounced the symptoms.

Treat hypoglycemia by consuming 15-20 grams of glucose or a simple carbohydrate. Wait 15 minutes and recheck your blood glucose. If hypoglycemia continues,

consume an additional 15-20 grams of carbohydrate. Once blood sugar returns to normal, eat a small snack if your regularly scheduled meal is more than an hour or two away.

Examples of simple carbohydrates to treat hypoglycemia include:

- Glucose tablets – follow package directions
- Gel tubes – follow package directions
- 4 ounces regular soda or fruit juice
- 2 tablespoons of raisins
- 8 ounces fat-free or low-fat milk

## Recipes to Try

### Beef Barley Soup

#### Ingredients

*7- 1 cup servings*

- 2 teaspoons canola oil
- 1 pound boneless beef round steak, cubed
- 2 carrots, sliced
- ½ cup onion, chopped
- 1 cup fresh mushrooms, sliced
- 1 cup celery, chopped
- 48 ounces of reduced sodium beef broth
- 14 ounces petite cut diced tomatoes, no added salt
- 1 cup water
- 2 bay leaves
- ½ cup uncooked barley
- 1 cup frozen peas



#### Directions

1. Cook beef on medium heat in a Dutch oven for 5 minutes or until browned, stirring frequently.
2. Remove beef and set aside. Sauté onions, celery, mushrooms, and carrots until tender but crisp, about 5 minutes.
3. Add beef, broth, bay leaves, and tomatoes and bring to a boil. Cover and reduce heat to simmer.
4. Continue simmering 1 hour. Add barley and frozen peas and bring back to a boil. Reduce heat to simmer and continue cooking 30 minutes, or until barley is tender.
5. Discard bay leaves.

*Nutrition Facts per serving*

Calories	228	Fat	3 grams
Protein	24 grams	Calories from fat	32
Carbohydrate	22 grams	Cholesterol	61 mg
Fiber	5 grams	Sodium	533 mg

This and other recipes available at  
<http://urbanext.illinois.edu/diabetesrecipes/intro.cfm>

**Spicy Chicken, Beans and Tomatoes**

*5- 1 cup servings*

**Ingredients**

- 1 teaspoon canola oil
- 1 pound skinless, boneless chicken breast, cut into strips
- 1 package taco seasoning mix, reduced sodium
- $\frac{2}{3}$  cup water
- 14 ounce can black beans, no added salt, drained and rinsed
- 14 ounce can unsalted stewed tomatoes with onion, peppers and celery, undrained
- 1 cup frozen corn, thawed



**Directions**

1. Spray large skillet with cooking spray and 1-teaspoon canola oil. Cook chicken for 10 minutes or until browned over medium high heat, stirring occasionally.
2. Remove chicken from skillet and set aside. Add taco seasoning mix and water to skillet, mixing well.
3. Add chicken, black beans, corn and tomatoes to skillet and simmer for 15 minutes.

*Nutrition facts per serving*

Calories	237	Fat	1.7 grams
Protein	27 grams	Calories from fat	15
Carbohydrate	27 grams	Cholesterol	52 mg
Fiber	7 grams	Sodium	556 mg

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### Sample Menu

<b>BREAKFAST</b>	<b>Amount/ Portion</b>
Oatmeal	1 cup
Soft tub margarine	1 teaspoons
Hard cooked egg	1
Fresh Blueberries	$\frac{3}{4}$ cup
Chopped walnuts	2 tablespoons
Skim Milk	1 cup
510 Calories; 60 Grams Carbohydrate; 4 Carbohydrate Choices	
<b>LUNCH</b>	
Beef barley soup <sup>†</sup>	1 serving
Whole wheat crackers	6
Peanut butter	2 tablespoons
Purple grapes	16
Skim milk	1 cup
646 Calories; 70 grams Carbohydrate; 4.5 Carbohydrate Choices	
<b>DINNER</b>	
Spicy Chicken, Beans and Tomatoes <sup>†</sup>	1 serving
Avocado	$\frac{1}{4}$ avocado
Tossed green salad	1 serving
Oil and vinegar	2 tablespoons
Steamed broccoli	1 cup
Vanilla ice cream	$\frac{1}{2}$ cup
Skim milk	1 cup
602 Calories; 71 Carbohydrates; 5 Carbohydrate Choices	
<b>Total: 1758 Calories; 201 Grams Carbohydrate; 13.5 Carbohydrate Choices</b>	

<sup>†</sup> Recipes from *Recipes for Diabetes* at <http://urbanext.illinois.edu/diabetesrecipes/>  
or this newsletter



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