

Diabetes

Life Lines



April-May, 2017

- **Diabetes - the Medical Perspective**
- **Diabetes and Food**
- **Recipes to Try**
- **Menu Suggestions**

Diabetes - the Medical Perspective

Gastroparesis

Diabetic neuropathy is a potential complication of diabetes. It is more common with individuals who have had diabetes for a number of years. Over time, elevated blood glucose levels can damage nerves throughout your body. This is called neuropathy. There are several types of neuropathy. The neuropathy most commonly discussed is peripheral neuropathy, which causes pain, tingling, numbness, and weakness in your hands and feet.

Autonomic neuropathy affects the nerves that control the bladder, intestinal tract and other organs. When elevated blood glucose levels affect the nerves that control digestion it makes controlling blood glucose difficult and causes uncomfortable gastrointestinal symptoms. This form of autonomic neuropathy is known as

gastroparesis. The vagus nerve controls movement of food through the digestive tract. When the nerves controlling the muscles of the stomach are damaged the movement of food slows down or can even stop.

Symptoms of gastroparesis will vary depending on the severity but may include the following:

- Heartburn
- Nausea
- Alternating constipation and diarrhea
- Vomiting undigested food
- Abdominal bloating
- Feeling full even with a small intake of food
- Decreased appetite
- Erratic blood glucose levels
- Weight loss
- Stomach spasms
- Gastroesophageal reflux

Gastroparesis can make blood glucose control difficult. It is harder to predict the rise in glucose levels due to the slowed movement of food through the intestinal tract.

Your health care provider will order diagnostic tests if gastroparesis is

suspected. Treatment may include changes in food choices and timing of insulin injections. Because of the unpredictability of how food moves through the intestinal tract, you may need to take insulin more often or take it after eating a meal, rather than before. In addition to those changes, a medication that speeds up the movement of food through the intestinal tract may also be prescribed. In severe cases, a feeding tube can be placed in the small intestine that bypasses the stomach. Intravenous feedings are also an option when other treatments fail. Always consult with your healthcare provider for individualized diabetes care.

Diabetes and Food

Dietary modification can help decrease gastroparesis symptoms. Eating smaller, more frequent meals and sitting upright for at least one hour after eating may decrease symptoms. Chew foods well, especially meats. Taking a walk after meals may also help empty the stomach. Other suggested changes are avoiding high fat and high fiber foods. Fat takes longer to be digested so eating high-fat foods will only further slow digestion. This includes fatty meats, whole milk dairy products, butter, margarine, and oils. Choosing to bake, broil or grill your foods is always a better option than frying. Fat in liquid form is sometimes better tolerated than fatty solid food.

Fiber is the part of foods that is not digested. Fruits, vegetables and whole grains are rich in fiber. Canned fruits, cooked vegetables and processed grains may be better choices. An accumulation of undigested food and fiber can form into bezoars in the stomach. Bezoars can cause nausea, vomiting or an intestinal obstruction. Apples, berries, coconut, figs, oranges, Brussels sprout, green beans legumes, potato peels and sauerkraut have been associated with bezoar formation in people with gastroparesis. A trial of blenderized or liquid foods may be better tolerated than solid foods. To help maintain nutritional status, a low fiber, liquid nutrition supplement can be added.

When dietary modification and medication to speed up stomach emptying does not improve the symptoms of gastroparesis, a feeding tube or intravenous feedings may be necessary. A gastroenterologist should be consulted for other treatment options.

Work with your healthcare provider and a registered dietitian to modify your diabetes meal plan and adjust fat and fiber content as appropriate to keep blood glucose levels controlled. Wide swings in blood glucose control can make gastroparesis worse.

Recipes to Try

Basque Chicken

Ingredients

1.6 pounds skinless boneless chicken breast
1 tablespoon olive oil
2 tablespoons water

Seasoning:

2 teaspoons paprika
1 teaspoon garlic powder
2 tablespoons flour
2 tablespoons minced onion
½ teaspoon black pepper
½ teaspoon dried thyme
½ teaspoon dried oregano

6 servings per recipe



Directions

1. Combine all ingredients for seasoning in plastic container with lid. Add chicken and shake to coat. Refrigerate at least 2 hours, shaking several times to coat chicken with seasoning.
2. Add oil to non-stick skillet. Add chicken and cook to brown. Add about 2 tablespoons water and cover to steam until chicken is done; about 20 minutes.

Nutrition Facts per serving:

Calories	218	Fat	6 gram
Protein	36 grams	Calories from fat	54
Carbohydrate	3 grams	Cholesterol	93 mg
Fiber	0 gram	Sodium	77 mg

Strawberry Smoothie

Ingredients

4 ounces non-fat, no sugar added strawberry yogurt, frozen
2 strawberries
6 ounces Crystal Light lemonade

1 serving per recipe

Directions

1. Combine all ingredients in blender.
2. Blend until smooth



Nutrition Facts per Serving:

Calories	78	Fat	0 gram
Protein	6 grams	Calories from fat	0
Carbohydrate	13 grams	Cholesterol	8 mg
Fiber	1 gram	Sodium	85 mg

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

Sample Menu

BREAKFAST	Amount/ Portion
Poached egg	1 egg
White toast	1 slice
Soft tub margarine	1 teaspoon
Applesauce	½ cup
259 Calories, 30 gm carbohydrates; 2 Carbohydrate Choices	
SNACK	
Strawberry Smoothie †	1 serving
Light Cheese	1 ounce
Goldfish Crackers	1 serving
250 Calories; 29 Grams Carbohydrates; 2 Carbohydrate Choices	
LUNCH	
Chicken Noodle Soup	1 cup
Low Fat Cottage Cheese	½ cup
Saltine Crackers	6 crackers
Sliced Peaches	½ cup
413 Calories; 50 Grams Carbohydrates, 3 carbohydrate Choices	
SNACK	
Raspberry Non-Fat Greek Yogurt	6 ounces
Saltine Crackers	6 crackers
180 Calories; 25 Grams Carbohydrates; 2 ½ Carbohydrate Choices	
DINNER	
Basque Chicken †	1 serving
Green Beans	1 cup
Mashed Potatoes	1/2 cup
Dinner Roll	1 roll
423 Calories; 38 Grams Carbohydrates; 3 ½ Carbohydrate Choices	
SNACK	
Skim Milk	1 cup
Non-fat Sugar-free Pudding	½ cup
150 Calories; 25 Grams Carbohydrates; 2 ½ Carbohydrate Choices	
Total: 1675 Calories, 197 Carbohydrates, 15 ½ Carbohydrate Choices	