

## **SECTION 3: INFORMATION FOR DIABETICS**

If you or a loved one is diagnosed with a condition like Type 2 diabetes, it can seem overwhelming. However, modern knowledge has gained much ground on the subject, and it can be managed; it simply takes a little extra forethought. This guide is here to help.

### What is Type 2 Diabetes?

In a nutshell, type 2 diabetes is a medical condition that involves insulin resistance and hyperglycemia (high blood sugar). The major detail in this condition is insulin, a hormone that is produced by the pancreas. It is responsible for taking sugar (glucose) from your blood and moving it to the cells in your body, which use it as an energy source.

For a more detailed description, please visit:

<http://www.lillydiabetes.com/Pages/how-does-insulin-work.aspx>

For those with type 2 diabetes, insulin becomes less effective at doing this, causing high blood sugar. In response, the pancreas produces more insulin to compensate. This overworking of the pancreas can cause it to shut down; rendered completely unable to produce the insulin your body needs. The resulting high blood sugar can lead to serious health detriments such as eye, kidney, and nerve problems as well as heart disease. To keep your blood sugar under control, your doctor may prescribe medication, such as insulin injections, to help keep those levels in check. Fortunately, however, most cases of type 2 diabetes can be controlled through proper diet and exercise.

### Dietary Management of Diabetes

Management of type 2 diabetes can be done through monitoring the intake of carbohydrate, which your body uses for energy. After eating carbohydrates, the body's blood sugar rises. With type 2 diabetes, however, the body cannot regulate this on its own, so diabetics must regulate their carbohydrate intake to compensate. With that in mind, here are some guidelines to get you started:

- A good rule of thumb is to aim for 45-60 grams of carbohydrate per meal
- Keep to around 15 grams of carbohydrate per snack
- Going below 130 grams of carbohydrate per day is not recommended
- Because carbohydrates are important for proper bodily function, low-carbohydrate diets (such as the 'Atkins' diet) are not recommended for diabetics and should be avoided
- Diabetics with kidney disease should limit their protein intake to approximately 0.8 grams per kilogram of body weight.

- To convert your body weight from pounds to kilograms, you can use an online conversion calculator which you can find at <http://www.metric-conversions.org/weight/pounds-to-kilograms.htm>
- Fiber is also useful in managing blood sugar levels. Foods that contain fiber include vegetables, fruits, and whole grains. Be sure to eat these often,
- It is a good idea to check with your doctor before beginning any dietary program, just to be sure.

Source:

Nelms M., Lacey K., Roth S. L., & Sucher K. P. *Nutrition Therapy and Pathophysiology*. Belmont, CA: Wadsworth, Cengage Learning. 2011

## Carbohydrate Counting

The process of carbohydrate counting is the centerpiece for your healthy diet, and is especially important for diabetics. It can be done simply by referring to the diabetic exchange list (found at the website below), and using the exchange table therein to see how many grams of carbohydrate are in 1 serving of a given food. A good rule of thumb is to aim for 45-60 grams of carbohydrate per meal.

You can also look at the amount of carbohydrate listed on a product's "Nutrition Facts" label. Simply subtract the amount of fiber (listed as 'Dietary Fiber') from the total carbohydrate (listed as 'Total Carb.'). This will leave you with the actual amount of carbohydrate in the product. Remember, the amounts given on the label are for 1 serving, so be sure to pay attention to the serving size and take that into account.

To access the diabetic exchanges, please copy and paste the following link into your browser:

<http://www.glycemic.com/diabeticexchange/the%20diabetic%20exchange%20list.pdf>

Source:

<http://www.diabetes.org/food-and-fitness/food/planning-meals/carb-counting>

## Exchanges for Shelley Foodbank Items

Below is a list of the carbohydrate content in common items you will receive from the Foodbank:

| ITEM           | SERVING SIZE | CARBOHYDRATES |
|----------------|--------------|---------------|
| Baked Beans    | 1/4 cup      | 15 g          |
| Beans (Cooked) | 1/2 cup      | 5 g           |

|                           |                 |      |
|---------------------------|-----------------|------|
| Beans (Raw)               | 1 cup           | 5 g  |
| Cake                      | 2" square       | 15 g |
| Canned Milk               | 1/2 cup         | 12 g |
| Cereal                    | 1/2 cup         | 15 g |
| Chili                     | 1/2 cup         | 15 g |
| Fruit (Fresh or Juice)    | 1/2 cup         | 15 g |
| Fruit (Dried)             | 1/4 cup         | 15 g |
| Hamburger Helper          | 1 cup           | 23 g |
| Jell-O                    | 1/2 cup         | 15 g |
| Lentils                   | 1/3 cup         | 15 g |
| Lima Beans                | 1/2 cup         | 15 g |
| Mac & Cheese              | 1 cup           | 30 g |
| Other Meat                | 1 oz.           | 0 g  |
| Pie Filling               | 1/3 cup         | 26 g |
| Pork                      | 1 oz.           | 0 g  |
| Potato (Baked or Steamed) | 1 small (3 oz.) | 15 g |
| Potato (Mashed)           | 1/2 cup         | 15 g |
| Ramen Noodles             | 1/2 cup         | 15 g |
| Refried Beans             | 1/2 cup         | 15 g |
| Rice                      | 1/3 cup         | 15 g |
| Soup                      | 1 cup           | 15 g |
| Spaghetti/Pasta           | 1/2 cup         | 15 g |
| Tomato Sauce              | 1/2 cup         | 5 g  |
| Tomatoes (Cooked)         | 1/2 cup         | 5 g  |
| Tomatoes (Raw)            | 1 cup           | 5 g  |
| Tuna Fish                 | 1/4 cup         | 0 g  |

### Diabetic (and Budget) Friendly Recipes

Diabetic dietary restrictions can seem overwhelming at first, but there are countless resources designed to give diabetics healthy and delicious meals. Here are a few ideas (provided by Diabetic Living Online) that are both healthy and affordable:

#### **Hearty Chicken and Bean Casserole**

You will need:

- 8 ounces (1-1/4 cups) dried Great Northern beans (another variety may be substituted)
- 1 Tbsp. canola or olive oil
- 6 chicken thighs (about 2-14 lbs total), skinned
- 2 medium carrots, thinly sliced
- 1 medium onion, cut into thin wedges
- 1 stalk celery, sliced

- 2 cloves garlic, minced
- 1 14-1/2 ounce can no salt added diced tomatoes, un-drained
- 6 ounces light, cooked smoked sausage, cut into bite-size pieces
- 1/2 tsp. dried thyme, crushed (optional)
- 1/4 tsp. salt
- 1/8 or 1/4 tsp. cayenne pepper (optional)

**Directions:**

1. Rinse beans. In a large saucepan combine beans and 4 cups cold water. Bring to boiling; reduce heat. Simmer, uncovered, for 2 minutes. Remove from heat. Cover; let stand for 1 hour. (Or, soak beans in water overnight in a covered pan.) Drain beans and rinse. In the same saucepan combine beans and 4 cups cold water. Bring to boiling; reduce heat. Cover and simmer 1 to 1-1/2 hours or until tender. Drain beans.
2. Preheat oven to 350 degrees F. In a large skillet, heat oil over medium-high heat. Add chicken; reduce heat to medium-low. Brown chicken about 10 minutes, turning once to brown both sides. Remove chicken from skillet. Drain all but 1 Tbsp. of drippings from the skillet.
3. Add carrots, onion, celery, and garlic to drippings in skillet. Cover and cook about 10 minutes or until vegetables are tender, stirring occasionally. Stir in drained beans, un-drained tomatoes, sausage, salt, and, if desired, thyme and cayenne pepper. Bring to boiling. Transfer mixture to a 2-quart rectangular baking dish. Arrange chicken thighs on top.
4. Bake, uncovered, about 25 minutes or until chicken is no longer pink (180 degrees F).

**Variation (easy version):**

Omit dried beans and step 1. Add 2 15-ounce cans rinsed and drained beans to the vegetable mixture in step 3 with the tomatoes. Omit the salt. Use 1 tsp. bottled minced garlic in place of the fresh garlic.

**Nutrition Facts per Serving:**

Servings per recipe: 6

Per serving (1 chicken thigh with about 3/4 cup bean mixture): 347 cal., 10 g total fat (3 g sat. fat), 98 mg cholesterol, 481 mg sodium, 32 g total carbohydrate., (10 g fiber, 6 g sugars), 33 g protein.

**So-Easy Pepper Steak**

You will need:

- 2 pounds boneless beef round steak, cut 3/4 to 1 inch thick
- Salt and black pepper
- 1 14-1/2 ounce can Cajun, Mexican, or Italian-style stewed tomatoes; un-drained
- 1/3 cup tomato paste with Italian seasoning
- 1/2 teaspoon bottled hot pepper sauce
- 1 16 ounce package frozen pepper stir-fry vegetables (yellow, green, and red peppers with onions)
- Hot cooked whole wheat pasta (optional)

Directions:

1. Trim fat from meat. Cut meat into serving-size pieces. Sprinkle lightly with salt and black pepper. Place meat in a 3-1/2 or 4 quart slow cooker. In a medium bowl combine un-drained tomatoes, tomato paste, and hot pepper sauce. Pour over meat in cooker. Top with frozen vegetables.
2. Cover and cook on low-heat setting for 10 to 12 hours or high-heat setting for 5 to 6 hours. If desired, serve with hot cooked pasta.

Nutrition Facts per Serving:

Servings per recipe: 8

Per serving: 196 cal., 5 g total fat (2 g sat. fat), 54 mg cholesterol, 411 mg sodium, 9 g carbohydrate (1 g fiber, 3 g sugars), 27 g protein.

## **Tuna Salad Pockets**

You will need:

- 1 12 ounce can solid white tuna (water-pack), drained
- 1/4 cup finely chopped onion
- 1/4 cup thinly sliced celery
- 1/4 cup shredded carrot
- 1 Tbsp. capers, rinsed and drained (optional)
- 2 Tbsp. olive oil
- 2 Tbsp lime juice (optional)
- 1 Tbsp. Dijon-style mustard (or another variety, if desired)
- 1 Tbsp. champagne vinegar or white wine vinegar (or another variety if necessary)
- 1 1/2 cups torn mixed salad greens
- 1/2 cup slivered almonds, toasted (optional)
- 2 large whole wheat pita bread rounds, halved crosswise

Directions:

1. In a medium bowl, combine tuna, onion, celery, carrot, and capers (if used); set aside. For vinaigrette: In a small screw-top jar, combine olive oil, lime juice (if used), mustard, and vinegar. Cover and shake well to combine. Pour vinaigrette over tuna mixture; toss gently to combine.
2. Place pita bread half in each of four shallow salad bowls. Top pita bread halves with tuna mixture. Makes four servings.

Nutritional profile not provided.

Note: There are many more budget-friendly recipes for diabetics found on the website:

<http://www.diabeticlivingonline.com/diabetic-recipes/main-dishes/meals-less>

