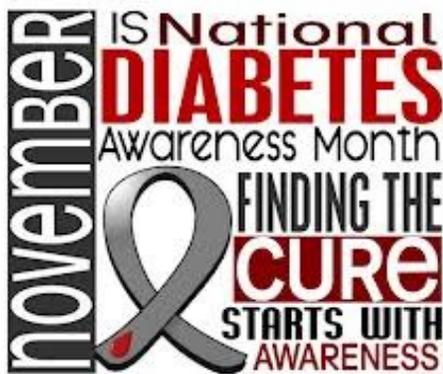


NATIONAL DIABETES MONTH

Healthy Eating Tip of the Month- November 2015



Statistics of 2014

Total U.S. population	Total U.S. population with diabetes	Amount of people living w/ diabetes
318.9 million	29.1 million	1 in 11 people have diabetes

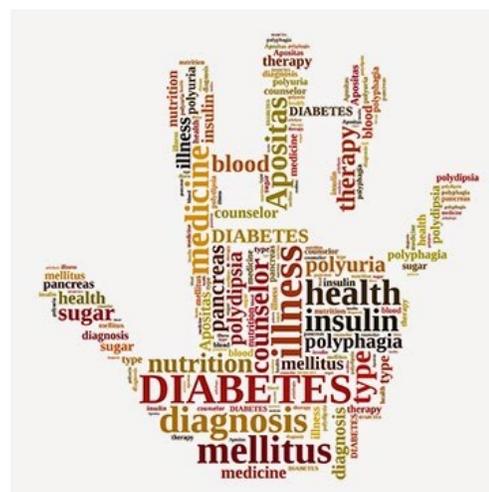
The total U.S. population living with diabetes is 29.1 million (9.1% of the U.S. population)

- ◆ 21.0 million are **diagnosed** cases
- ◆ 8.1 million are **undiagnosed** cases

*** **undiagnosed** cases include those who are living with diabetes, but are unaware. It is important to be aware in order to reduce the risk of further complications such as heart disease, stroke, blindness, and kidney disease. Stay informed by regularly having your blood glucose levels checked.

Why is it important to be informed?

November is National Diabetes Awareness Month. The purpose of having a diabetes awareness month is to get people informed and show support to those who have diabetes. It is important to be informed in order to know the causes, symptoms, management, and prevention of this disease.



TYPE 1 DIABETES MELLITUS

What is it?

- ◆ Autoimmune disease where the body destroys its' own pancreas cells causing the inability to produce any or adequate insulin
- ◆ Insulin is a hormone that is released by the pancreas in order for the body to use the sugars (glucose) from carbohydrates to produce energy
- ◆ Insulin injections become necessary in order to obtain insulin for those who have T1DM

Who is at risk?

- ◆ Usually diagnosed in children and young adults
- ◆ Only 5% of those with diabetes have T1DM

Common symptoms?

- ◆ Excessive thirst
- ◆ Frequent urination
- ◆ Extreme hunger
- ◆ Blurred vision
- ◆ Unexpected weight loss

TYPE 2 DIABETES MELLITUS

What is it?

- ◆ Metabolic disorder due to consistent high blood sugars causing the body to become insulin resistant
- ◆ Characterized by a hyperglycemic (high blood sugar) state

Risk factors?

- ◆ **Weight**
- ◆ **Fat distribution**– primarily in the abdomen
- ◆ **Inactivity**
- ◆ **Family history**
- ◆ **Age**– incidence rate of diabetes increases after age 45
- ◆ **Ethnicity**– higher risk in African Americans, Mexican Americans, American Indians, and Asian Americans

How to manage T2DM?

- Eat healthy and have balanced meals
- Center your diet around high fiber foods. These include fruits, vegetables, and whole grains
- Regular physical activity. 30 minutes of aerobic exercise daily is recommended
- Properly adhere to diabetes medication or insulin therapy
- Regularly monitor blood sugar



 American Diabetes Association.



Reasons for a person with diabetes blood sugar to RISE?

- ◇ High carbohydrate meals
- ◇ Lack of consistent carbohydrate intake throughout the day
- ◇ Lack of adherence to oral diabetes medication/ insulin injections
- ◇ Stress increases hormone levels that raise blood glucose
- ◇ Dehydration

Reasons for a person with diabetes blood sugar to FALL?

- ◇ Lack of food/ lack of consistent carbohydrate intake throughout the day
- ◇ Excessive intake of oral diabetes medication/ insulin injections
- ◇ Side effects from other medications
- ◇ More physical activity than usual

How to track blood glucose?

Use a blood glucose meter to measure blood glucose in that moment

Have HgA1c tested twice a year to obtain the average blood glucose over the past 2-3 months

Current trending research

A study was conducted to explore how changes in weight, diet, and physical activity effect the risk of developing diabetes. The major results include:

- ◇ A weight loss of **11 pounds** over a period of time can reduce the risk of diabetes by **55%**
- ◇ A combination of weight loss **>7%** of one's body weight, meeting

individualized physical activity goals, and meeting individualized dietary fat intake goals can reduce one's risk of developing diabetes by >90%

Hamman et al. (2006). Effect of weight loss with lifestyle intervention on risk of diabetes. Diabetes Care, 29, 2102-2107. doi: 10.2337/dc06-0560

How to become more informed?!

Visit the American Diabetes Association website at:
<http://www.diabetes.org/>

Healthy Meal Planning for Diabetes

KEY POINTS

- **Consistent timing of meals**– Your meal and snack intake should be consistent throughout the day. Make it a goal to have a meal or snack that has carbohydrates incorporated every 4 to 5 hours.
- **Consistent balanced meals**– Each meal and snack should have a carbohydrate incorporated. It is important to keep a balanced diet.

AVERAGE ESTIMATE OF CARBOHYDRATE INTAKE?

WOMEN

45-60 grams of carbohydrates per meal

15 grams of carbohydrates per snack



MEN

60-75 grams of carbohydrates per meal

15-30 grams of carbohydrates per snack

***Speak with a Registered Dietitian about your individualized carbohydrate needs

SAMPLE MEAL PLAN

WOMEN

Breakfast:

- 1/2 cup of oatmeal (15g)
- 1 small banana (15g)
- 1 tbsp. peanut butter
- 8 oz. skim/ 2% milk (15 g)
- Black coffee

Total= 45 grams of carbohydrates

MEN

Lunch/Dinner:

- 4 oz. chicken breast
- 2/3 cup cooked pasta (30g)
- 1/2 cup jarred pasta sauce (15g)
- 1 small wheat dinner roll (15g)
- 1 tsp. butter
- 1/2 cup of green beans

Total= 60 grams of carbohydrates

NATIONAL DIABETES MONTH

Nutrition Facts

Serving Size 1 Slice (38g)
Servings Per Container about 18

Amount Per Serving

Calories 80 Calories from Fat 10

% Daily Value *

Total Fat 1g **2%**

Saturated Fat 0g **0%**

Trans Fat 0g

Cholesterol 0mg **0%**

Sodium 140mg **6%**

Total Carbohydrate 17g **7%**

Dietary Fiber 4g **16%**

Sugars 5g

Protein 5g

Vitamin A 0% • Vitamin C 0%

Calcium 2% • Iron 4%

* 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
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

Fat 9 • Carbohydrate 4 • Protein 4

INGREDIENTS: WHOLE WHEAT FLOUR (WHOLE GRAIN), WATER, SUGAR, WHEAT GLUTEN, YEAST, SOYBEAN OIL (NON-HYDROGENATED), HONEY, SALT, CONTAINS 2% OR LESS OF THE FOLLOWING: CALCIUM SULFATE, AMMONIUM

Check the serving size first. All of the nutritional information on this label will be based off of this portion.

The amount of **calories** are important to know especially when trying to lose or maintain a certain weight. Speak with a Registered Dietitian to get an estimate of your daily caloric needs.

Total fat includes both the healthy fats (mono and polyunsaturated fats) and the less healthy fats (saturated and trans fats). Choose food items that are lower in saturated and trans fats. Too much of these less healthy fats increase the risk for heart disease and stroke.

Total Carbohydrates include sugars, complex carbohydrates, and fiber. These all affect blood glucose levels. When carb counting look at the Total Carbohydrates, rather than just the grams of sugar.

Fiber is usually not digested or only partially digested by humans, yet high fiber foods are strongly recommended due to their various benefits. Fiber improves the digestive tract, helps lower cholesterol, and can improve blood glucose control. Women should have 21-25 grams of fiber per day and men should have 30-38 grams of fiber per day.

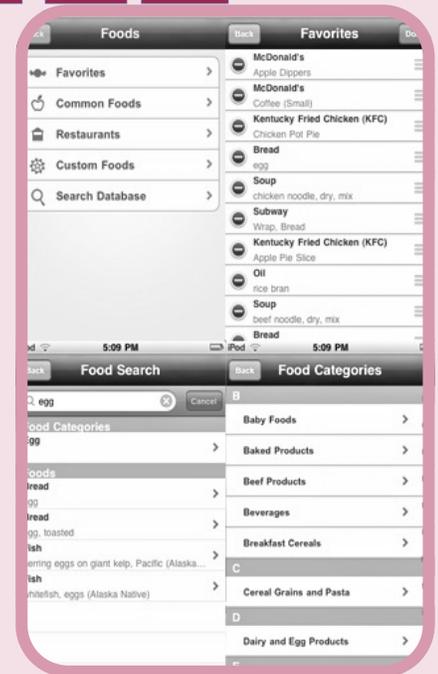
Percent daily value is on the right hand side of the food label. It is based off a 2000 calorie daily diet and shows the percent of each nutrient this food product provides. It is important to remember that not all individuals follow a 2000 calorie diet. The amount of calories you should consume daily is based off your specific dietary needs.

The ingredients list is listed in descending order by weight. The first ingredient on this list is what the product has in it the most. It is important to check the ingredients list to see if the product is high in whole grains. This would say whole wheat flour as the first ingredient. Whole grains are preferred for individuals with diabetes.

Carb counting has gone **MOBILE**



What this can
do for **YOU!**



Consistent carbohydrate intake is important for those who have diabetes. Knowing and keeping track of the amount of carbohydrates consumed during a meal and throughout the day can be difficult. Using these top rated mobile apps, carbohydrate counting can now be made simple and easy to keep track of!

The amount of carbohydrates an individual should consume per meal is specific to their needs. Speak with a Registered Dietitian or certified diabetes educator to help determine how to manage your diabetes correctly. Use these apps as a helpful tool for carbohydrate counting and managing blood sugar (glucose) levels.



Mobile Apps for Carbohydrate Counting

Tracker3 Diabetes Planner

free version available



Glucose Buddy

free version available



Snap shot of app:

- What this app can track:
 - carbohydrate intake
 - nutritional value of food items
 - blood glucose levels & trends
 - insulin information
 - medication information
 - exercise/physical activity
 - weight
- Keep track of glucose levels in the logbook and chart glucose trends
- 100,000+ food item database and the item's nutritional value
- Can enter own recipes into the app to receive the accurate nutritional information
- Adjustable food serving size can be tailored to get the exact carbohydrate intake
- Customize a "favorites" list for both exercise and food items for quick, easy entry

Snap shot of app:

- What this app can track
 - carbohydrate intake
 - nutritional value of food items
 - medication information
 - insulin dose
 - exercise/ physical activity database to search from
 - A1c (average blood sugar over the past 2-3 months)
 - blood pressure
 - weight
- Set daily reminders to test blood sugar (glucose) and take medications
- Keep track of glucose levels in the logbook and chart glucose trends
- Access to the food item database and the item's nutritional value
- Community forum within the app allowing for support & discussions
- Can sync iPhone logs with www.glucosebuddy.com



My Fitness Pal

FREE



Snap shot of app:

- Primarily used as a food and exercise journal, but can be used as a carbohydrate counter as well
- Food database of 3,000,000 +items
- Can enter own recipes into the app to receive the accurate nutritional information
- Conveniently able to scan barcodes of packaged food items to receive the nutrition information data
- Can calculate the users caloric need based on their height, weight, gender, and lifestyle factors
- Customize a “favorites” list for both exercise and food items for quick, easy entry
- Easily connect with others who use My Fitness Pal via forums within the app
- Can track a variety of measurements including steps, weight, waist/hip circumference

Diabetic Connect

Social Forum

FREE

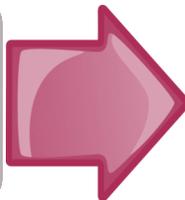


Snap shot of the app:

- This app is used as a social forum, which allows the user to network with others and follow forums of various discussions
- Easy way to get questions answered and contribute ideas & thoughts to community discussions
- Helps to create great support systems with other users who may be experiencing similar situations
- The activity feed allows you to stay updated on current trending topics

***** Studies have found that family and friends support has encouraged greater physical activity levels and other positive self-management behaviors for those with diabetes.**

Current trending research



****A study was conducted to see if the use of mobile apps for self-management of diabetes can lead to positive changes in one's clinical course.**
—This study concluded that **83.1%** of people experienced positive changes after using the mobile app to help self-manage their diabetes
—Mobile apps lead to **increase frequency** of measuring blood glucose, having regular meals, increase in physical activity, taking medications regularly, and weighing oneself regularly
—Overall, the use of mobile apps as a tool for diabetes self-care management can lead to positive changes in one's clinical course

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