

# Diabetes Prevention

## Small Steps, Big Rewards

### Diabetes Risk Assessment

There are a number of things that can increase your risk of having pre-diabetes or diabetes. Some of the most common risk factors are listed below.

\_\_\_ Age over 45

\_\_\_ Low physical activity level

\_\_\_ Ethnic background

\_\_\_ Hypertension (High blood pressure  
135/85 is considered pre-hypertension  
140/90 is considered hypertension)

\_\_\_ Family history of diabetes

\_\_\_ History of diabetes during pregnancy.

\_\_\_ Being very overweight  
compared to your height (BMI)

Your BMI

**What is diabetes?** Type 2 diabetes is the most common form of diabetes. In type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin. Insulin is necessary for the body to be able to use sugar. Sugar is the basic fuel for the cells in the body, and insulin takes the sugar from the blood into the cells. When glucose builds up in the blood instead of going into cells, it can cause two problems:

- Right away, your cells may be starved for energy.
- Over time, high blood glucose levels may hurt your eyes, kidneys, nerves or heart.

**What are the warning signs of diabetes?**

- Excessively tired, excessively thirsty, Frequent urination, unexplained weight loss
- Headaches, blurry vision

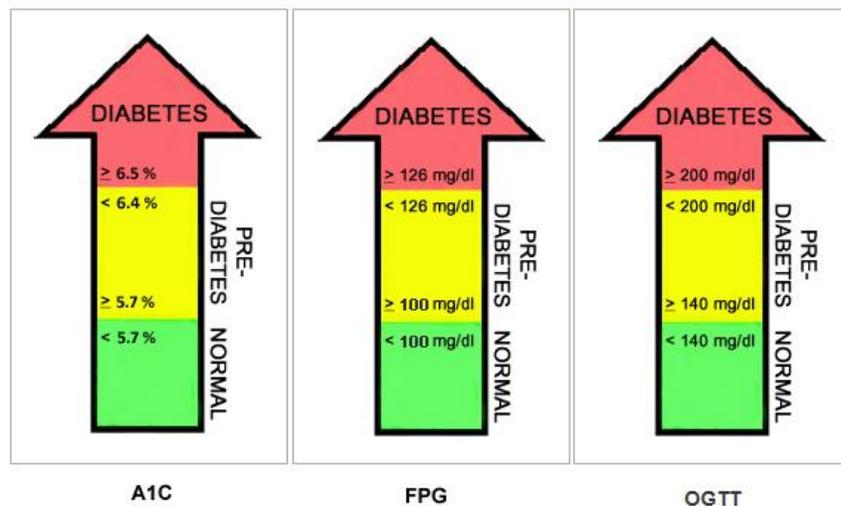


**Before people develop type 2 diabetes, they almost always have "prediabetes"**—blood glucose levels that are higher than normal but not yet high enough to be diagnosed as diabetes. There are 57 million people in the United States who have prediabetes. Recent research has shown that some long-term damage to the body, especially the heart and circulatory system, may already be occurring during prediabetes.

Prediabetes is a serious medical condition that can be treated. The good news is that the recently completed Diabetes Prevention Program (DPP) study conclusively showed that **people with prediabetes can prevent the development of type 2 diabetes by making changes in their diet and increasing their level of physical activity.** They may even be able to return their blood glucose levels to the normal range.

While the DPP also showed that some medications may delay the development of diabetes, diet and exercise worked better. **Just 30 minutes a day of moderate physical activity, coupled with a 5-10% reduction in body weight, produced a 58% reduction in diabetes.**

The American Diabetes Association is developing materials that will help people understand their risks for pre-diabetes and what they can do to **halt the progression** to diabetes and even to, "turn back the clock" In the meantime, we have a wealth of resources for people with diabetes or at risk for diabetes that can be of use to people interested in prediabetes.



There are three different tests your doctor can use to determine whether you have prediabetes:

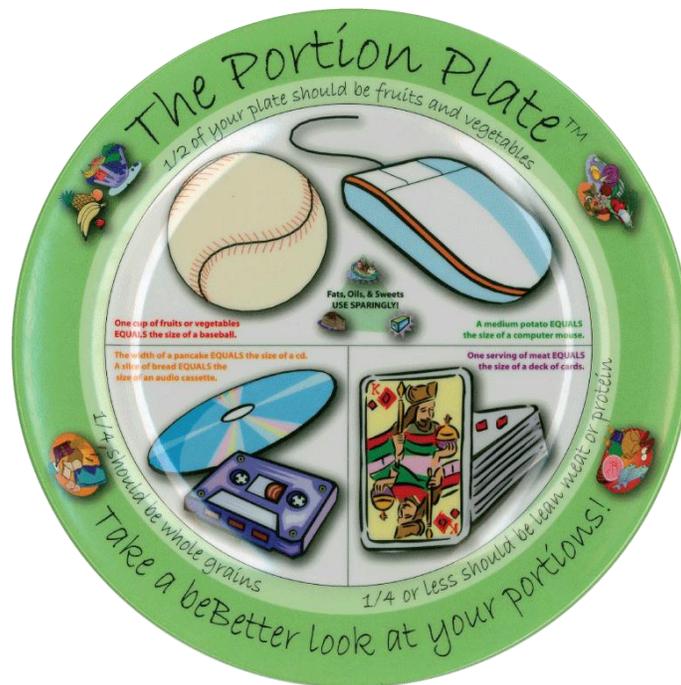
- The A1C test
- The fasting plasma glucose test (FPG)
- or the oral glucose tolerance test (OGTT).

The blood glucose levels measured after these tests determine whether you have a normal metabolism, or whether you have prediabetes or diabetes.

If your blood glucose level is abnormal following the FPG, you have impaired fasting glucose (IFG); if your blood glucose level is abnormal following the OGTT, you have impaired glucose tolerance (IGT). Both are also known as prediabetes.

Here are a few tips on making healthful food choices for you and your entire family. Eat lots of vegetables and fruits. Try picking from the rainbow of colors available to maximize variety.

- **Eat non-starchy vegetables** such as spinach, carrots, broccoli or green beans with meals.
- **Choose whole grain foods** over processed grain products. Try brown rice with your stir fry or whole wheat spaghetti with your favorite pasta sauce.
- **Include dried beans** (like kidney or pinto beans) and lentils into your meals.
- **Include fish** in your meals 2-3 times a week.
- **Choose lean meats** like cuts of beef and pork that end in "loin" such as pork loin and sirloin. Remove the skin from chicken and turkey.
- **Choose non-fat dairy** such as skim milk, non-fat yogurt and non-fat cheese.
- **Choose water and calorie-free "diet" drinks** instead of regular soda, fruit punch, sweet tea and other sugar-sweetened drinks.
- **Choose liquid oils** for cooking instead of solid fats that can be high in saturated and *trans* fats. Remember that fats are high in calories. If you're trying to lose weight, watch your portion sizes of added fats.
- **Cut back on high calorie snack foods and** desserts like chips, cookies, cakes, and full-fat ice cream.
- Eating too much of even healthful foods can lead to weight gain. **Watch your portion sizes.**



More great nutrition information is available from the following websites:

[www.choosemyplate.gov](http://www.choosemyplate.gov)  
[www.Diabetes.org](http://www.Diabetes.org)

Healthy Eating and Weight Management Classes at the Naval Hospital Wellness Center include:

"Diabetes Prevention", "Aim for a Healthy Weight", and a monthly Commissary Shopping Tour

Call 360-475-4541 or e-mail [nhb.healthpromotion@med.navy.mil](mailto:nhb.healthpromotion@med.navy.mil) for more information

**Exercise is part of a healthy lifestyle for everyone**, and it's especially important for people with diabetes. But exercise doesn't necessarily mean running a marathon or bench-pressing 300 pounds. The goal is to get active and stay active by doing things you enjoy, from gardening to playing tennis to walking with friends.

How much exercise do the experts say I need?

The Dietary Guidelines for Americans suggest how much activity Americans should do. Keep in mind they are goals, not the place to start.

- People with pre-diabetes, diabetes, or the general adult public should aim for a **minimum of 30 minutes most days**. Walking, gardening, doing yard work, swimming, or cleaning house will all work to meet this goal. Anything that increases your heart rate and causes you to break a light sweat.
- **Children and teens should aim for at least 60 minutes most days.**



In addition, the Diabetes Prevention Program—a large study done in people with pre-diabetes—showed that 150 minutes of physical activity a week (30 minutes, five times a week) helped prevent or delay type 2 diabetes. In this study, people also lost 10 to 20 pounds by making changes in their eating habits.

Do these guidelines seem hard to fit in to your busy life? It's not easy to find the time. You won't go from zero to thirty or sixty (minutes), in a day or week. Take one step at a time. Slowly build up to your goal.

**The following classes** at the Naval Hospital Wellness Center support safely increasing your physical activity:

“Tai Chi” – Held Wednesdays from 1115 to 1200

“Fitness Planning”, held monthly at 1pm or 4pm



### Summary:

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