

Prediabetes

Note to the Health Care Professional: Topics in this handout are discussed in Chapter 5 of the *American Dietetic Association Guide to Diabetes Medical Nutrition Therapy and Education* (1). This handout also adapts two charts from the National Diabetes Education Program publication *Small Steps, Big Rewards* (2): the table with values for fasting blood glucose and 2-hour oral glucose tolerance tests and the at-risk weight chart.

When counseling clients with prediabetes, consider the following strategies:

- Explaining that clients have an opportunity to prevent diabetes
- Discussing lifestyle and behavior change interventions that have been effective in preventing type 2 diabetes in high-risk individuals
- Helping clients set action-oriented, realistic goals that they are confident they can achieve
- Assessing which types of community support and programs are available for clients

References

1. Wylie-Rosett J, Delahanty LM. Diabetes Prevention. In: Ross TA, Boucher JL, O'Connell BS, eds. *American Dietetic Association Guide to Diabetes Medical Nutrition Therapy and Education*. Chicago, IL: American Dietetic Association; 2005:49-58.
2. National Diabetes Education Program. *Small Steps, Big Rewards: Your Game Plan to Prevent Type 2 Diabetes*. http://ndep.nih.gov/diabetes/pubs/GP_Booklet.pdf. Accessed September 10, 2007.

Prediabetes



What Is Prediabetes?

If you have prediabetes, you are at risk for developing type 2 diabetes. Type 2 diabetes is a lifelong disease. If it is not treated, it can harm your kidneys, nerves, and eyes. People who have type 2 diabetes are also more likely to have heart problems or a stroke than people who do not have diabetes.

Forty percent of adults in the United States between the ages of 40 and 74 have prediabetes.

Tests for Prediabetes

Doctors have two ways to test for prediabetes:

- **Fasting blood glucose test (FGB):** In this test, the doctor checks the amount of glucose in your blood after you have not eaten for 8 to 12 hours.
- **2-Hour oral glucose tolerance test (OGTT):** In this test, you drink a glucose drink after you have not eaten for 8 to 12 hours. Your blood glucose is then checked after 2 hours.

The Blood Glucose Levels chart shows blood glucose numbers for normal blood glucose, prediabetes and type 2 diabetes.

Blood Glucose Levels

	FBG	2-Hour OGTT
Prediabetes	100 to 125 mg/dL	140 to 199 mg/dL
Diabetes	126 mg/dL or more	More than 200 mg/dL
Normal	Less than 100 mg/dL	Less than 140 mg/dL

Who Should Get Tested?

The At-Risk Weight Charts (next page) can help you learn whether you should be tested for prediabetes.

1. Measure your height and weight.
2. **Check** the column that lists your height. Be sure to use the chart that is meant for your ethnic group.
3. Look at the weight listed in the same row as your height. If your weight is equal to or greater than the weight in the chart, you are at-risk. For example, a weight of 128 pounds or more is an at-risk weight for an Asian-American person who is 5 feet tall.
4. If you are age 45 years or older and you have an at-risk body weight, you should be tested for prediabetes.
5. If you are younger than 45 and you have an at-risk weight, check the Risk Factors for Prediabetes list. If you have one or more of the risk factors on this list, you need to be tested.



At-Risk Weight Charts

If You Are Not Asian American or Pacific Islander At Risk BMI \geq 25	
Height	Weight
4'10"	119
4'11"	124
5'0"	128
5'1"	132
5'2"	136
5'3"	141
5'4"	145
5'5"	150
5'6"	155
5'7"	159
5'8"	164
5'9"	169
5'10"	174
5'11"	179
6'0"	184
6'1"	189
6'2"	194
6'3"	200
6'4"	205

If You Are Asian American At Risk BMI \geq 23	
Height	Weight
4'10"	110
4'11"	114
5'0"	118
5'1"	122
5'2"	126
5'3"	130
5'4"	134
5'5"	138
5'6"	142
5'7"	146
5'8"	151
5'9"	155
5'10"	160
5'11"	165
6'0"	169
6'1"	174
6'2"	179
6'3"	184
6'4"	189

If You Are Pacific Islander At Risk BMI \geq 26	
Height	Weight
4'10"	124
4'11"	128
5'0"	133
5'1"	137
5'2"	142
5'3"	146
5'4"	151
5'5"	156
5'6"	161
5'7"	166
5'8"	171
5'9"	176
5'10"	181
5'11"	186
6'0"	191
6'1"	197
6'2"	202
6'3"	208
6'4"	213

Risk Factors for Prediabetes

- Your mother, father, brother or sister has diabetes.
- Your blood pressure is higher than 140/90 mmHg.
- Your HDL (good) cholesterol is less than 35 mg/dL.
- Your triglycerides are higher than 250 mg/dL.
- You get little regular physical activity.
- You are of African American, American Indian, Asian American, Pacific Islander, or Latino descent.
- The skin around your neck or armpits looks dirty, even after you wash it.
- You have blood vessel problems in the heart, brain or legs.
- You are a woman with a history of gestational diabetes; you gave birth to a baby weighing more than 9 pounds; or you have a history of polycystic ovary syndrome (PCOS).

How to Lower Your Risk of Type 2 Diabetes

If you have prediabetes, you can lower your risk for type 2 diabetes by being active for at least 30 minutes a day, at least five days of every week.

Also, if you have prediabetes and are overweight, you can cut your risk of type 2 diabetes by losing 5% to 10% of your body weight. (For someone who weighs 200 pounds, that is a 10- to 20-pound weight loss.)

The Rewards of Being Active

Regular physical activity offers many rewards. Being active for 30 minutes a day, at least five days each week can help you:

- Keep your heart healthy and your bones strong.
- Control your weight.
- Build muscle.
- Cope with stress.
- Feel better!



Before You Start

To be safe, talk with your doctor before you start any exercise plan. Together you can find activities that are right for you.

Tips for Being Active

- If you haven't been physically active in a long time, start slowly. Be active for 10 minutes at a time, three or four times a week. Each week, add a minute or two to your active time. Work your way up to at least 30 minutes a day, at least five days each week.
- Most people can enjoy walking. Try walking for 15 minutes in the morning and then 15 minutes after lunch or dinner. See the Activities to Try box for other ideas.
- If you have a day when you feel tired, aim to be active for 10 minutes. Some activity is better than no activity. Every minute counts!

Activities to Try

- Riding a bike
- Cleaning the house
- Washing the car
- Working in the garden
- Walking the dog
- Raking leaves
- Water aerobics
- Yoga
- Dancing

Losing Weight

You're ready to start your weight loss plan. But how exactly are you going to lose 5% to 10% of your body weight? To lose weight safely:

- Start with small goals that focus on behavior. You may want to try walking for 20 minutes, four times a week. Another goal could be choosing raw vegetables as your evening snack, three times a week.
- Make certain to choose goals that you feel ready to meet.
- Lose weight slowly. Try to lose no more than ½ to 1 pound in a week.
- Be active. (See the tips in this handout on how to be active.)

Tips for Cutting Calories

- Trim the size of your meals and snacks by one third.
- Switch from regular soda to water or diet drinks.
- Keep high-calorie foods like cookies, chips, and ice cream out of the house. If you want a treat, go to the store and buy a single serving size.
- Choose low-fat or nonfat milk, yogurt and cheese.
- Fill up on vegetables and fruits.
- For lunch and dinner, fill half of your plate with nonstarchy vegetables (see list) or a green salad.

Types of Nonstarchy Vegetables

- | | |
|---------------|-----------------------------------|
| • Asparagus | • Green beans |
| • Beets | • Lettuce |
| • Broccoli | • Mushrooms |
| • Cabbage | • Onions |
| • Carrots | • Peppers (green, red, or yellow) |
| • Cauliflower | • Spinach |
| • Celery | • Tomatoes |
| • Cucumber | • Zucchini |



More Ideas for Weight Loss Success

- Use a notebook to track your progress. Write down what you eat and drink each day. Also record how many minutes you are active each day. Once a week, check your weight and your waist or hip measurements.
- Get regular help and support. Meet with your registered dietitian, join a support group, or ask a friend to help keep you on track.
- Find ways to make healthy food choices and be active when you are away from home.
- Learn how to handle times when you eat too much. For example, many people overeat at parties. It may help to have a snack before you go to a party so you won't be starving when you get there. Stick to calorie-free or low-calorie drinks. Dance and talk instead of eating. Bring a tray of veggies or cut-up fruit to be sure you have healthy foods to nibble on.

