### DIABETES CARE

## TYPE 2 DIABETES A GUIDE TO MANAGING YOUR DIABETES

CHARLES B. WANG COMMUNITY HEALTH CENTER 王嘉廉社區醫療中心

### AN OVERVIEW OF TYPE 2 DIABETES

#### WHAT IS DIABETES?

Diabetes is a chronic disease in which people have too much sugar in their blood. Over a long period of time, high blood sugar can cause many health problems. Diabetes occurs when your body cannot make or use insulin.

#### WHY INSULIN IS IMPORTANT...

The starches and sugars in the food you eat give your body energy. Insulin helps take the sugar from your blood and into your cells where the sugar is broken down into energy. Without insulin, your body cannot use or store sugar, and too much sugar stays in your blood.

## WHAT KIND OF HEALTH

PROBLEMS CAN DIABETES CAUSE? Diabetes can affect any part of your body.

Common problems are:

- Nerve damage
- Eye damage
- Kidney disease
- Heart disease and stroke
- Leg amputations due to infections, or problems with blood vessels or nerves.

Even though there is no cure for diabetes, you can control diabetes by healthy diet, exercise, weight control, and medicine (if needed).



#### WHAT IS TYPE 2 DIABETES?

It is the most common form of diabetes and often occurs in adults, especially those who are overweight and over age 40.

People with Type 2 diabetes are not able to make enough insulin, or their cells do not use insulin properly. However, they can control their blood sugar through weight control, regular exercise and a healthy diet. Some people with Type 2 diabetes also need to lower their blood sugar by medication.

#### A GUIDE TO MANAGING DIABETES

You can control diabetes and help prevent diabetes-related health problems. Controlling diabetes requires making longterm lifestyle changes which may be hard at first. But you can do it! Stay positive and focus on making one change at a time.

#### YOU ARE NOT ALONE!

There is a group of people who can help you manage your diabetes.

- Doctors
- Certified Diabetes Educators
- Dietitians
- Eye & foot doctors
- Pharmacists
- Dentists
- Social workers
- National or local diabetes associations
- Friends & family

Stay positive and focus on making one change at a time.



# 7 SIMPLE TIPS TO MANAGE DIABETES

## 1. HEALTHY EATING

#### A) How can healthy eating help my diabetes?

Healthy eating has many benefits: you can lose weight, lower your blood sugar, cholesterol, and blood pressure, and reduce your risk of diabetes-related health problems.

#### B) What is healthy eating?

The following are general healthy eating tips. For more information, you should see a dietitian who can design a meal plan for you to follow every day.

- Eat regular meals and small healthy snacks if needed, such as plain mixed nuts or wheat crackers throughout the day.
- Limit sugary and sweet-tasting foods and sauces such as tong sui and hoisin sauce, etc.
- Limit fatty, greasy, or fried foods such as doughnuts, chicken wings, spare ribs, sausages, fried chicken, french fries, etc.
- Eat lean protein such as fish, skinless chicken breast, and lean beef and pork.
- Eat more high-fiber whole grains such as whole grain bread, whole wheat pasta and brown rice. Limit intake of refined grains such as white rice and white bread.
- Drink less fruit juice and choose fresh fruits instead, but limit to small portions.
- Eat plenty of dark green and orange vegetables, which are high in fiber and vitamins.
- Watch your portion sizes, especially portion sizes of starches, e.g., rice, noodles, bread and potato.

## 2. BEING PHYSICALLY ACTIVE

#### A) How can exercise help control my diabetes?

- Lower blood sugar.
- Lower blood pressure.
- Raise "good" or HDL cholesterol.
- Lower "bad" or LDL cholesterol.
- Prevent heart attack and stroke.
- Keep your heart and bones strong.
- Lose weight or maintain a healthy weight.
- Increase your energy level.
- Reduce stress.

#### B) What kind of exercise can help?

You should try to get at least 30 minutes of physical activity each day. Try activities such as:

- Swimming
- Brisk walking/hiking
- Biking
- Dancing
- Team sports such as soccer, basketball, etc.
- Badminton

#### C) What kind of exercises should I do?

Before you start any exercise program, talk to your doctor about what kind and how much exercise is right and safe for you.



You should try to get at least 30 minutes of physical activity each day.

#### D) Be "Extra Active" Everyday

If you don't have time to exercise, here are some ways to be "extra active" in your daily life:

#### At home...

- Walk around while you talk on the phone.
- Play with the kids.
- Take the dog for a walk.
- Get up to change the TV channel instead of using the remote control.
- Work in the garden or rake leaves.
- Clean the house.
- Wash the car.
- Do household chores. For example, make two trips to take the laundry downstairs instead of one.

#### At work...

- Walk over to see a co-worker instead of calling or e-mailing.
- Stretch or walk around instead of taking a coffee break and eating.
- During a lunch break, go for a short walk.

#### On the go...

- Take the stairs instead of the elevator.
- If you take the bus or subway, get off one stop early and walk.
- Park at the far end of the shopping center lot and walk.
- At the grocery store, walk every aisle.
- Next time you get together with friends, do a fun physical activity such as tennis or badminton.

#### A Few More Exercise Tips:

- Warm up for a few minutes with stretches, a short brisk walk or light jog before you start exercising.
- When you are finished exercising, cool down your body by stretching or walking.
- Drink plenty of water before and after exercise.
- Check your blood sugar level before and after exercise. Do not exercise if your fasting blood sugar level is above 250 mg/dL or if you have ketones in your urine. If your blood sugar is below 100 mg/dL, eat a small snack.
- Check your feet for blisters or sores before and after exercise.
- Wear proper footwear such as running shoes or cross trainers.
- Carry food or glucose tablets to treat low blood sugar.
- Carry your medical information (e.g., list of medicines, contact numbers of your doctor and family members) with you in case of an emergency.

## 3. TAKING MEDICATION

If you are using insulin or other medications, take them as directed by your doctor.

#### A) Why do I have to take pills or insulin?

Since your body doesn't have enough insulin, your blood sugar level will be above normal. Pills and/or insulin can help lower your blood sugar level.

#### B) How do diabetes pills work?

There are several types of diabetes pills, which work in various ways:

- Help your body use its own natural insulin better.
- Slow down the liver's release of stored sugar into the blood.
- Raise insulin production by helping your pancreas make more insulin
- Lower blood sugar absorption by reducing the absorption of sugar from the intestines.

#### C) What do I need to know about insulin?

In some cases, you don't have to take insulin for your diabetes. Your doctor will help you decide if taking insulin is the best choice for you.

## 4. CHECKING YOUR BLOOD SUGAR LEVEL

#### A) Why do I need to check my blood sugar regularly?

Checking your blood sugar level will tell you how well your treatment is working. You and your doctor can use the results to adjust your meal plan, exercise level, and medicine to make sure they are working well to control your diabetes.

Keeping your blood sugar at the level recommended by your doctor will lower your risk for diabetes-related health problems.



Your doctor will help you decide if taking insulin is the best choice for you.

#### B) What should my blood sugar level be?

Talk to your doctor about what level is safe for you. For most people, the ideal blood sugar range is:

Before a meal: 80---130 mg/dL

2 hours after a meal: below 180 mg/dL

#### C) How do I check my blood sugar level?

There are various tests:

**A1C test:** this is done by your doctor which shows your average blood glucose level over the last 3 months.

**Finger-stick method:** this involves pricking your finger with a tiny needle to draw a drop of blood which is used to measure blood sugar.

Other: this involves wearing a monitor on your wrist like a watch which measures your blood sugar. It can't replace the regular finger-stick test but it lets you see how your blood sugar changes over the course of the day.

#### **Record the Test Results**

Write your blood sugar results in a logbook and review with your doctor regularly.



Ask your doctor when and how often you need to check your blood sugar.

#### D) How often should I check my blood sugar?

You should usually do it before meals, 2 hours after meals, and/ or at bedtime. People who take insulin usually need to test more often than those who do not take insulin. You also need to test more often when you're sick. Ask your doctor when and how often you need to check your blood sugar.

## E) What other numbers do I need to know to control my diabetes?

#### Know your diabetes ABC numbers!



#### is for A1C test (average blood sugar test) You should aim for an A1C level below 7%.



#### is for blood pressure

Ideal blood pressure level is below 140/90 mmHg.



#### is for cholesterol

- Your triglyceride level should be less than 150 mg/dL.
- You should aim for a total cholesterol level below 200 mg/dL.
- Try to keep your bad cholesterol (also called LDL) below 100 mg/dL.
- Try to keep your good cholesterol (also called HDL) level at:
  - If you are female: higher than 55 mg/dL
  - If you are male: higher than 45 mg/dL

## 5. COPING WITH COMMON PROBLEMS

#### A) Hypoglycemia (Low Blood Sugar)

#### Things that make blood sugar too LOW:

- Eating less than usual, or delaying or skipping a meal.
- Exercising more than usual.
- Taking more insulin than needed.
- Taking too much diabetes medication.

#### What are the warning signs?

- Dizziness or light-headedness
- Headache
- Hunger
- Feeling nervous and shaky
- Feeling sleepy or confused
- Sweating a lot
- Your blood sugar is at or below 70 mg/dL

#### How to treat hypoglycemia:

Eat or drink one of these items (each item provides 15 grams of carbohydrates):

- 1/2 cup (4 oz.) of any fruit juice or soda
- 1 cup (8 oz.) of milk
- 1 or 2 teaspoons of sugar or honey
- 5 or 6 pieces of hard candy
- 1 glucose gel or tablet

Test your blood sugar 15 minutes later after you had one of the above items. If it is still below 70 mg/dL, eat another 15 grams of carbohydrate. Test blood sugar again in 15 minutes.

If you cannot test your blood sugar right away but you feel symptoms of hypoglycemia, eat one of the items listed above.

See a doctor right away if your blood sugar numbers are lower than your recommended levels for 2 to 3 days.

#### B) Hyperglycemia (High Blood Sugar)

#### Things that make blood sugar too HIGH:

- Eating more than usual.
- Exercising less than usual.
- Stress.
- Taking certain medicines or not taking your diabetes medication.
- Eating foods high in sugar.
- Being sick.

#### What are the warning signs?

- Urinate often
- Feeling thirsty or hungry often
- Weakness or tiredness
- Blurred vision
- Dry mouth
- Headache

#### How to treat hyperglycemia:

Drink plenty of fluids and take your usual dose of insulin or diabetes pills.

#### See a doctor right away if :

- Your blood sugar is more than 250 mg/dL for more than 2 to 3 days.
- You are vomiting for more than 1 day.
- You have a high fever (101.5°F).
- You are sick for more than 2 days.
- You feel confused or can't think clearly.

#### C) Managing Diabetes When You are Sick

Tips:

- Check your blood sugar every 4 hours.
- 2 Keep taking your insulin and diabetes pills. Even if you can't keep food down, you still need your diabetes medicine.
- 3 Ask your doctor if you need to change the amount of insulin or pills you take.
- 4 Drink at least a cup (8 ounces) of water or other caloriefree, caffeine-free liquid every hour while you're awake.
- 5 If you can't eat your usual food, try drinking juice or eating crackers, popsicles, or soup.

#### See your doctor right away if:

- Your blood sugar is over 250 mg/dL for more than a day.
- You have medium to large amounts of ketones in your urine (you may use urine strips to test for ketones at home).
- You feel sleepier than usual.
- You have trouble breathing.
- You can't think clearly.
- You've had diarrhea for more than 6 hours.



Tell your doctor if you have any problems with your diabetes care plan.

## 6. COPING WITH DIABETES

Living with diabetes isn't easy. It's normal to feel anxious and stressed sometimes. Stress can affect your blood sugar level. There are a number of things you can do to cope with diabetes:

- Tell your doctor if you have any problems with your diabetes care plan.
- Talk to close family members or friends about stresses you feel at home, school, or work.
- Join a diabetes support group. It helps to talk to other people who have problems like your own, and you can share ways of dealing with diabetes.
- Get counseling. One-on-one or family counseling may help.

#### 7. REDUCE YOUR RISK OF PROBLEMS FROM DIABETES

#### **Recommendations:**

**Get an annual eye exam.** You won't notice early signs of problems because the changes in your eyes are small. They can only be detected by an eye doctor or an ophthalmologist.

**Have regular dental exams.** Brush your teeth and floss everyday to avoid problems with your mouth, teeth, or gums.

See your doctor right away if you have any sores that won't heal. Check your feet everyday for cuts, blisters, red spots, and swelling.

#### If you smoke, quit.

**Get vaccinations.** Get shots for flu, pneumovax and others as advised by your doctor.

Take baby aspirin every day if prescribed by your doctor.

#### MY DIABETES CARE RECORD

Write down your test results in the record below to help you keep track of your self-management plan.

A1C - At least twice each year Usual goal: less than 7					My Target
DATE:					
RESULT:					
BLOOD PRESSURE (BP) - Each visit Usual goal: less than 140/90					
DATE:					
RESULT:					
CHOLES Usual go	TEROL (LDL) bal: less tha				
DATE:					
RESULT:					
WEIGHT - Each visit My desitred weight:					
DATE:					
RESULT:					

#### CHECK YOUR BLOOD SUGAR

DATE	Before meals Usual goal 80 to 130 My target:	1-2 hours after meals Usual goal below 180 My target:	Bedtime Usual goal 110-150 My target:

#### MY DIABETES CARE CHECKLIST

Use this checklist to help you keep track of you need to do when you see your doctor.

EACH DOCTOR VISIT:	ONCE EACH YEAR:	AT LEAST ONCE:		
Foot check	Dental exam	Pneumonia shot		
Review self-care	Dilated eye exam			
Plan (Meal, Exercise and Medication)	Flu shot			
Weight check	Kidney check			
	Complete foot exam (If needed)			

Find out what your ideal weight is by BMI (Body Mass Index). Below is a sample BMI chart for your reference. You can also talk to your doctor to help set your weight goal.

#### BODY MASS INDEX TABLE

#### Overweight : Asian BMI > 23 Obesity : Asian BMI > 25

BMI	20	21	22	23	24	25	26	27	28	29	20
HEIGHT (feet and inches)	WEIGHT (lbs)										
4'11"	99	104	109	114	119	124	128	133	138	143	148
5'0"	102	107	112	118	123	128	133	138	143	148	153
5'1"	106	111	116	121	127	132	137	143	148	153	158
5'2"	109	115	120	125	131	136	142	147	153	158	164
5'3"	113	118	124	130	135	141	146	152	158	163	169
5'4"	116	122	128	134	140	145	151	157	163	169	174
5'5"	120	126	132	138	144	150	156	162	168	174	180
5'6"	124	130	136	142	148	155	161	167	173	179	185
5'7"	127	134	140	147	153	159	166	172	178	185	191
5'8"	131	138	144	151	158	164	171	177	184	190	197
5'9"	135	142	149	155	162	169	176	182	189	196	203
5'10"	139	146	153	160	167	174	181	188	195	202	209
5'11"	143	150	157	165	172	179	186	193	200	207	215
6'0"	147	155	162	169	177	184	191	199	206	213	221



General Info Line / 諮詢熱線 (212) 226-8339

#### Website / 網址

www.cbwchc.org

#### 268 Canal Street, New York, NY 10013

Internal Medicine / 内科部 (212) 379-6998 Obstetrics & Gynecology (OB/GYN) / 婦產科部 (212) 966-0228

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