

get
moving



TREAT
TO
TARGET



Slim
down
a few
pounds



EAT
more



of the
Good
Stuff

[SPECIAL REPORT] heart smart from the start

There are steps you can take to protect yourself from the most common (and least-discussed) complication of diabetes.

BY **Hope S. Warshaw, R.D., CDE**

ILLUSTRATIONS BY **Marco Marella**

Fears about health problems caused by diabetes often focus on blindness, kidney disease, amputations—problems caused by damage to small blood vessels. But there's a larger issue: heart disease. "There's too much hand-wringing about small-vessel diseases and not nearly enough awareness and sweat about the strong connection between

diabetes and cardiovascular disease," says Sylvia Rackow, 78 and PWD type 2, a board member for the advocacy group WomenHeart. She had a heart attack in 1990, 10 years before her diabetes was diagnosed. She now treats both conditions with medications and an active lifestyle.

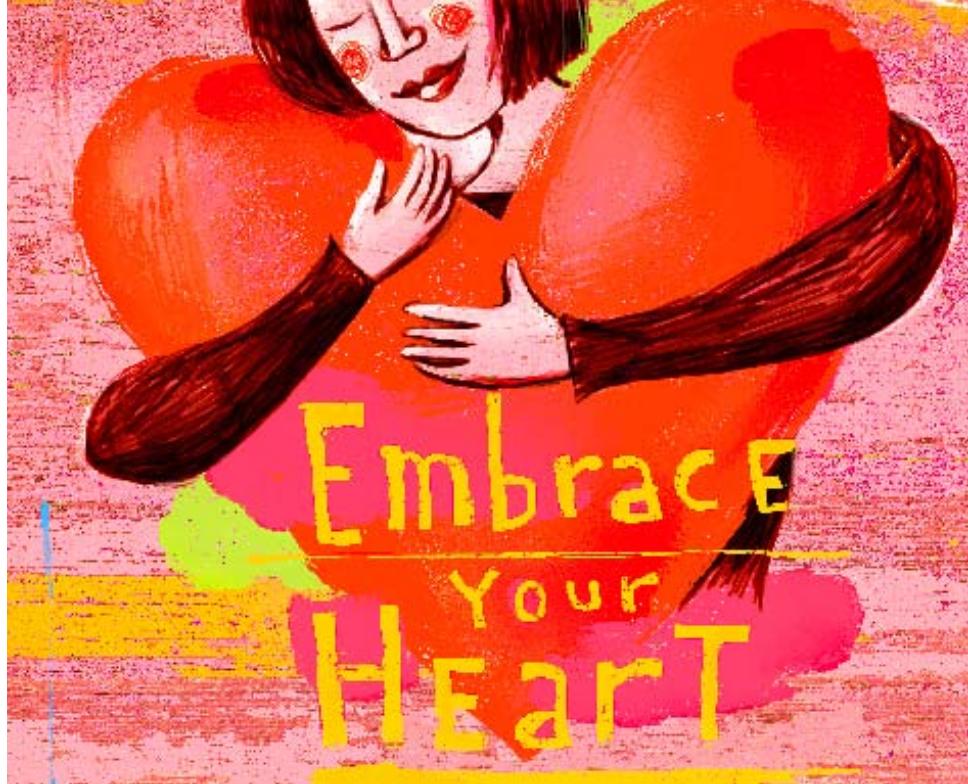
Heart disease and type 2 diabetes are inextricably intertwined, says Robert H.

Eckel, M.D., professor of medicine at the University of Colorado Denver and spokesperson for the American Heart Association's Heart of Diabetes campaign.

Heart disease often precedes type 2 diabetes. Damage to blood vessels from excess weight, inactivity, and inflammation can start years before blood glucose rises too high. Read on for ways to protect your heart.

What is CVD?

Cardiovascular disease (CVD) describes problems that affect the heart and circulatory system (blood vessels). These can be heart attacks, strokes, congestive heart failure, and more. Type 1 and type 2 diabetes—especially uncontrolled diabetes—bring a higher risk of these health issues.



7 action steps to protect your heart

Yes, you can prevent or minimize heart disease (and other diabetes complications, too).

The benefit of changing and treating heart disease risk factors is a healthier, longer life. “Staying healthy with diabetes goes beyond keeping tabs on blood glucose and includes controlling blood pressure and cholesterol,” says Chris Tobin, R.N., CDE, president of Health Care and Education for the American Diabetes Association (ADA). “The earlier in the process you can intervene, the fewer problems you’re likely to experience.” Start now:

1. Shed a few pounds.

Losing just 5–7 percent of your weight (that’s 10–14 pounds for a 200-pound person) can decrease the harmful inflammation and insulin resistance that characterize type 2 diabetes.

This is especially effective early on, before type 2 diabetes is diagnosed or detected.

2. Eat healthfully and be active—always. Choosing healthful foods, controlling portions, and being physically active will serve you well your entire life.

3. Reach and maintain your ABC targets. If you’re not meeting the targets for blood glucose, blood pressure, and cholesterol (see “ABCs of Control,” below), urge your provider to step up your treatment.

“When it comes to prioritizing efforts on lipids to reduce heart disease, research shows targeting LDL is most

ABCs of control

“To stay healthy now and in the future, hit the recommended ABC targets,” says Chris Tobin, R.N., CDE. Off target? Ask your provider how to step up your care.

A1C (blood glucose)

A1C: < 7%

Blood glucose:

- **Fasting/before meals:** 70–130mg/dl
- **1–2 hours after the start of a meal:** < 180 mg/dl

Blood pressure

Blood pressure: < 130/80 mmHg

Cholesterol/blood lipids

Total cholesterol: < 200 mg/dl

Triglycerides: < 150 mg/dl

LDL (bad) cholesterol: < 100 mg/dl
with heart disease: < 70 mg/dl

HDL (good) cholesterol:

Men > 40 mg/dl

Women > 50 mg/dl

From American Diabetes Association 2010 Clinical Practice Recommendations. If you have had diabetes for a long time, have other health problems, or have frequent low blood sugar, your A1C target may need to be higher than 7%. Discuss with your health care provider.



“I’m not a perfect eater, but I keep trying. It sounds overwhelming to change your life, but things fall into place when you take care of you.”

Alice Brainard, PWD type 2, 33, Indiana. High blood pressure; family history of CVD. Lost 80 pounds over 2 years; takes multiple medications (although less of them now) to control her ABCs.

Risks and rewards

You can modify some risk factors for type 2 diabetes and heart disease, but others you can’t. Concentrate on what you have the power to change.

You can change (or control)

- high blood pressure
- high LDL (bad) cholesterol
- high triglycerides
- low HDL (good) cholesterol
- smoking
- being overweight
- physical inactivity
- higher-than-normal blood glucose levels

You can’t change

- age
- race
- gender
- family history

important,” Eckel says. “Triglycerides are of secondary importance, and evidence is still lacking for the benefit of raising HDL.”

4. Take your medicine.

You may be on a slew of medications to control your ABCs—no one enjoys that cost or commitment. But research shows that PWDs are likely to need more medications over time to manage the progression of diabetes and heart disease. Talk to your provider if you have difficulty taking or affording your medications.

5. Take an aspirin a day.

Daily low-dose aspirin therapy is recommended for many people at

risk for or with heart disease and diabetes. Ask your provider if daily aspirin is right for you.

6. Don’t smoke. If you do smoke, talk to your health care provider about how to quit.

7. Get the health tests you need. Your provider can refer to the ADA Standards of Medical Care, which outline research-based guidelines for detecting any problems and managing the ABCs. The goal is to spot problems early and initiate treatment quickly. 

Contributing editor Hope Warshaw, R.D., CDE, is the author of several American Diabetes Association books, including Real-Life Guide to Diabetes (2009).



“The weeks I’m not hitting my glucose targets, I’m not being active.”
Sara aims to walk five times weekly.

Sara Brodsky Sieman, PWD type 1, 57, Massachusetts. Elevated cholesterol; family history of stroke, type 2 diabetes. Uses an insulin pump; takes a statin. Passed a recent stress test.

How Heart Troubles START

Blood vessel damage is often undetected for years. Here’s how the process unfolds:

Excess weight = increased fat mass

Fat mass produces harmful substances = **inflammation**

Inflammation = damaged blood vessels, higher blood pressure, abnormal cholesterol, and insulin resistance

(that elevates blood glucose)

Inflammation and insulin resistance feed each other, grow worse; over time, heart disease and/or type 2 diabetes develops