



# Behavioral Programs To Help Manage Type 1 Diabetes

A REVIEW OF THE RESEARCH FOR CHILDREN, TEENS, AND ADULTS

This summary is for you if your health care professional has said you have (or your child has) **type 1 diabetes**. This summary will tell you what researchers have found about behavioral programs to help manage type 1 diabetes. It does not cover specific treatments for diabetes.

## What Is Type 1 Diabetes?

Diabetes (also called “diabetes mellitus”) is a condition in which your body has trouble controlling the level of sugar (or glucose) in your blood. Insulin is a hormone that your body needs to use the sugar for energy. If you have type 1 diabetes, your pancreas (a gland behind your stomach) makes very little or no insulin. Without insulin, sugar builds up in your blood, and your blood sugar level gets too high.

It is important to manage diabetes because high blood sugar can cause serious health issues over time. Your health care professional can help you make a plan to manage your (or your child’s) diabetes. Your health care professional may also suggest a behavioral program to help you learn how to manage type 1 diabetes.

**Note:** This summary is for children, teens, and adults with type 1 diabetes. For caregivers of children or teens with type 1 diabetes, the words “you” and “your” in this summary are also meant to refer to your child or teen.

## What are behavioral programs for diabetes?

In behavioral programs for diabetes, a trained provider\* helps you learn to manage your diabetes. Some behavioral programs are one-on-one. Some are done in a group. The program may be done in person, on the phone, or online.

There are several types of behavioral programs for diabetes, including:

- » **Diabetes self-management education:** This type of program is focused on education about diabetes, the disease process, and treatment. A trained provider can help you learn how to manage your diabetes as part of your daily life. He or she can also help you set specific goals to manage your diabetes on your own. You will likely meet with the provider one or more times a week for at least a month. A trained provider may continue to support you after the program ends.
- » **Lifestyle programs:** In this type of program, a trained provider helps you learn how to make specific lifestyle changes to help manage type 1 diabetes. Lifestyle changes can help lower the risk of health issues from diabetes. Lifestyle programs may focus on diet, physical activity, or both.
  - **Dietary program:** Focuses on how to eat a healthy diet in order to manage blood sugar, stay at a healthy weight, and lower the risk of health issues from diabetes.
  - **Physical activity program:** Teaches you the right amount and the right types of physical activity for you. Some types of physical activity make your heart beat fast. Other types help strengthen your bones and muscles.

\* The trained provider may be a health care professional, such as a nurse, pharmacist, or dietitian. Or, the trained provider may be a person who is not a health care professional but is trained to provide behavioral programs for diabetes.



## HOW IS TYPE 1 DIABETES MANAGED?

You can manage the effects of diabetes on your health by trying to keep your blood sugar level within a healthy range. Your health care professional can help you set a blood sugar level goal and make a plan to manage your diabetes.

People with type 1 diabetes must take insulin to manage their blood sugar and must check their blood sugar level often each day. It is also important for people with type 1 diabetes to eat a healthy diet and be physically active.

Be sure to follow your management plan every day.



## A behavioral program for diabetes can help you:

- » Learn more about diabetes and how to follow your management plan
- » Set goals and learn problem-solving skills to help manage type 1 diabetes
- » Develop healthy behaviors, such as eating a healthy diet and being active
- » Learn how to take medicines and check your blood sugar correctly
- » Take steps to lower the risk for health issues from diabetes (see the section below for more information about possible health issues from diabetes)

## The trained provider may also talk with you about:

- » Signs of health issues from diabetes
- » Yearly tests to check for any health issues from diabetes (such as a urine test to check for kidney damage, a foot exam, and an eye exam)
- » How to cope with stress from living with diabetes

### What Have Researchers Found?

Researchers found that behavioral programs, mainly diabetes self-management education programs, helped people with type 1 diabetes better manage their blood sugar in the short term (up to 6 months after the end of the program). More research is needed to know if behavioral programs help in the long term.

## Why Is It Important To Manage Type 1 Diabetes?

It is important for people with type 1 diabetes to try to keep their blood sugar level within a healthy range.

Having high blood sugar (a condition called "hyperglycemia") can cause serious health issues in the long term. These may include:

- » Heart disease and heart attack
- » Stroke
- » Kidney problems
- » Eye problems and possibly blindness
- » Nerve damage
- » Foot problems, which in severe cases may lead to amputation (loss) of the foot

It is also important to watch for signs that your blood sugar is too low (a condition called "hypoglycemia"). If your blood sugar gets too low, you may suddenly feel weak, become dizzy, or faint. If not treated right away, hypoglycemia can be life threatening.

When your blood sugar level is within a healthy range, you are likely to:

- » Feel less tired and have more energy.
- » Heal better and have fewer skin infections.
- » Feel less thirsty, need to urinate less often, and have fewer bladder infections.

## The Source of This Information

The information in this summary comes from the report *Behavioral Programs for Diabetes Mellitus*, September 2015, produced by the University of Alberta Evidence-based Practice Center through funding by the Agency for Healthcare Research and Quality (AHRQ). For a copy of the report or for more information about AHRQ, go to [www.effectivehealthcare.ahrq.gov/diabetes-behavioral-programs](http://www.effectivehealthcare.ahrq.gov/diabetes-behavioral-programs).

Additional information came from the MedlinePlus® Web site at [www.medlineplus.gov](http://www.medlineplus.gov).

This summary was prepared by the John M. Eisenberg Center for Clinical Decisions and Communications Science at Baylor College of Medicine, Houston, TX. People with (or caregivers of children or teens with) type 1 diabetes gave feedback on this summary.



## TALKING WITH YOUR HEALTH CARE PROFESSIONAL

You may want to ask your health care professional:

How could a behavioral program help me manage my type 1 diabetes?

How do I sign up for a behavioral program?

How often and for how many months would I need to meet with the trained provider?

How long would each program session be?

Would my insurance cover the cost of the behavioral program?

Will I follow up with you after the behavioral program?