

Lifestyle Coach Facilitation Guide: Post-Core

A Closer Look at Type 2 Diabetes

Content Overview

This session paints a picture of life with type 2 diabetes. It describes how type 2 diabetes develops, its symptoms, and how the disease is diagnosed. If diagnosed with diabetes, a person should develop a diabetes care plan with a team of health professionals that will likely include a primary care physician, a diabetes educator, a registered dietitian, and other specialists. This session explains the daily management of diabetes that is necessary to prevent long-term complications associated with the disease.

Lifestyle Coach Preparation Checklist

Materials

- Post-core handouts:
 - Symptoms of Type 2 Diabetes
 - What is Diabetes?
 - How is Diabetes Diagnosed?
 - What Would My Medical Care be Like?
 - How Would My Life at Home Change?
 - Conditions and Complications Related to Diabetes
- “Food and Activity Trackers”
- “Lifestyle Coach’s Log”
- Balance scale

Key messages to reinforce ---

- According to the Centers for Disease Control and Prevention (CDC), there are approximately 26 million people in the United States with diabetes (2011).
- If you are diagnosed with type 2 diabetes, you and your doctor will develop a diabetes care plan. It would be recommended that your team of health care providers include: a primary care physician, a diabetes educator, a registered dietitian, a pharmacist, and other specialists as needed.
- We know that keeping blood glucose levels and other values, like blood pressure, lipids, etc. are important in preventing the long-term complications. Your doctor should provide a target range for you in each of these areas.
- There are symptoms and complications associated with uncontrolled diabetes. These can range from short-term to long-term problems.
- To reduce complications related to diabetes, you should try to maintain blood glucose levels within a given range, take prescribed medications as necessary, and develop a nutrition and physical activity plan.

After the session ---

At the completion of this session, do the following:

- Use the “Notes and Homework Page” for notes and follow-up tasks.
- Distribute “Food and Activity Trackers” (4) for the following month.



Symptoms of Type 2 Diabetes

Present: Throughout the lifestyle intervention, we have spent a lot of time focusing on prediabetes and how type 2 diabetes can be prevented or delayed. This session will switch gears and provide information on type 2 diabetes and how it can impact life physically and emotionally.

According to the Centers for Disease Control and Prevention (CDC), there are approximately 26 million people in the United States diagnosed with diabetes in 2011, and there is support available to assist and guide people in managing the disease. There is also evidence to suggest that keeping blood glucose levels within a good range can prevent the complications of diabetes.

What are the Symptoms of Diabetes?

The symptoms of diabetes can vary, ranging from mild to severe, or symptoms can even be absent. The most common symptoms include:

- Increased thirst
- Increased hunger
- Fatigue
- Increased urination, especially at night
- Weight loss
- Blurred vision
- Sores that do not heal

For people with type 2 diabetes, symptoms generally develop gradually. Many people do not find out they have type 2 diabetes until they develop a complication from the disease, such as problems with their vision or heart trouble. Often, a person can have the disease for many years before it is diagnosed.



What is Diabetes?

In order to describe diabetes, it is important to understand how the body processes and uses food. Each time we eat food, our bodies go through a process that changes the food into energy that our bodies can use for daily activity.

The food we eat is broken down by our bodies into “glucose.”

Glucose is what fuels the cells in our bodies. Glucose from the food is carried from the blood to cells throughout the body. Glucose, however, is not automatically absorbed by cells.

Insulin is required to “unlock” the cells and allow the glucose to be changed into energy.

If there is not enough insulin or if the body does not use insulin properly (a condition known as **insulin resistance**), then glucose is not able to get into the cells. As a result, glucose builds up in the bloodstream (high blood sugar).

There is no cure for diabetes. Properly managing the disease requires lifestyle changes and medication. When diabetes is not controlled, glucose builds up in the blood and can cause damage to vital organs.

There are two types of diabetes. In **type 1** diabetes a person’s body does not make enough insulin to help move glucose into the cells for energy. In **type 2** diabetes a person’s body does not use insulin effectively and over time will not make enough insulin. Type 1 diabetes typically happens to people under the age of 30 and cannot be prevented. Type 2 diabetes can be prevented.



How is Diabetes Diagnosed?

Testing for diabetes and prediabetes should be done by a health care provider. There are currently three tests that can be done.

Fasting plasma glucose (FPG)

This test measures for impaired fasting glucose (IFG); a person's blood glucose is measured first thing in the morning following an eight-hour fast.

Fasting blood glucose levels:

- **Normal:** below 100 mg/dl (milligrams per deciliter)
- **Prediabetes:** between 100 and 125 mg/dl
- **Diabetes:** 126 mg/dl or above

Oral glucose tolerance test (OGTT)

This test measures for impaired glucose tolerance (IGT). A person's blood glucose is measured after an eight-hour fast and again two hours after drinking a glucose-rich solution.

Levels measured two hours after drinking the solution:

- **Normal:** below 140 mg/dl
- **Prediabetes:** 140-199 mg/dl
- **Diabetes:** 200 mg/dl or above

Glycated Hemoglobin (HbA1c)

Blood test measures a person's average glucose level over an eight to twelve week period before the administration of the test. Blood is drawn from a person's arm; fasting is not necessary.

HbA1c levels:

- **Normal:** HbA1c below 5.7%
- **Prediabetes:** HbA1C 5.7 – 6.4%
- **Diabetes:** HbA1C 6.5% and above



What Should My Medical Care be Like?

If you are diagnosed with diabetes, you and your doctor will work out a diabetes care plan and build a team of health care providers to give you the care and information that you will need to safely and effectively manage the disease.

Primary Care Physician	Your first visit with your physician would include a physical examination, medical history, and blood and urine tests. Follow-up visits to your physician should happen regularly.
Registered Dietitian	Meeting with a registered dietitian who is trained in diabetes management is important. The dietitian would teach you about how different foods affect your blood glucose levels and get you started on a healthy eating plan (if you aren't already maintaining those practices).
Diabetes Educator	A diabetes educator is trained to help people with diabetes learn to self-manage their disease. A diabetes educator can be a nurse, dietitian, pharmacist, or other health care provider. Your doctor should give you a referral for a diabetes education visit.
Specialists	Diabetes can cause problems with blood vessels and nerves. This can lead to problems with blood flow to the heart, eyes, kidneys, legs, and other organs. You should talk to your doctor about making sure that you have visits with specialists as needed.
YOU	You are the most important person in managing your diabetes. Diabetes management and control starts with proper self-care. You should seek every resource to learn as much as you can about your diabetes. Knowledge is power!



How Would My Life at Home Change?

The cornerstone of diabetes care is managing your daily lifestyle. To reduce complications related to diabetes, you should try to maintain proper blood glucose, blood pressure and lipid levels, take prescribed medications, and develop a nutrition and physical activity plan.

Blood Glucose Levels	You will need to test your blood glucose levels as determined by your physician. Your doctor will give you a target range for your blood glucose levels.
Physical Activity	It is recommended that you get at least 30 minutes of physical activity five days a week. Physical activity helps maintain proper glucose levels, helps you lose or maintain weight, and contributes to a healthy heart. You should talk with your physician before starting your activity plan.
Medications	People with diabetes may need to take medications to help control blood glucose levels.



Conditions and Complications Related to Diabetes

There are symptoms associated with high and low blood glucose levels:

Hyperglycemia (High Blood Glucose): Hyperglycemia is when your blood glucose levels are too high and your body is not using its insulin properly. High blood sugar levels can lead to the development of long-term complications.

Hypoglycemia (Low Blood Glucose): Hypoglycemia is when blood glucose levels drop or fall below the normal range. Some of the symptoms of hypoglycemia include dizziness, headache, shaking, and irritability.

There are long-term complications associated with diabetes:

Heart Disease and Stroke: Blood vessel problems are related to uncontrolled diabetes. This can lead to heart disease and stroke. To lower the risk of complications from diabetes, remember the ABC'S:

A: A1c (a measure of blood glucose level); **B: Blood pressure;**
C: Cholesterol **S: Smoking Cessation** (if you smoke)

Kidney Disease: Blood vessel problems can also lead to kidney disease. Problems arise when the kidneys have to work extra hard to filter the excess glucose in the blood. Over time, this damage can lead to kidney failure. Kidney failure is a serious and life threatening problem, so proper control of blood glucose levels and blood pressure are vital for kidney health.

Foot Complications: Blood vessel and nerve problems can affect blood flow to the feet and legs. Good blood glucose control and proper foot care can prevent problems leading to ulcers, circulation, and nerve problems, and amputation.

Eye Complications: People with diabetes are at a higher risk of developing retinal/eye problems. Complications include glaucoma (damage to the optic nerve), cataracts (cloudy area in the lens), and retinopathy (general term for disorders of the retina).

Post-Core: A Closer Look at Type 2 Diabetes

Follow Up

Notes and Homework Page

While it is fresh in your mind, use this page to write notes about the session. Consider what worked, what you need to do differently for the next session, whom you need to follow up with, information or ideas needing further research, and general concerns or issues that need to be addressed.