

Basic Diabetes Education Plan

Getting Ready to Learn About Diabetes

Learning something new can be hard when you are not feeling well. Here are some good things to tell the staff:

- Who do you want to learn with you? We would like to have someone who will be helping you at home learn with you.
- What is the best way for you to learn? Do you learn best by reading a book or pamphlet or learn by doing things yourself?
- If you are not feeling well, if you are in pain or you cannot focus on learning right now.

Because this teaching is about your health, the staff may explain something more than once and give you information in “bite size” pieces over several days. If there is something you do not understand, **it’s OK to ask** us to explain.

What I Need to Learn About Diabetes

By the time I leave the hospital I will be able to tell the staff:

- What type of diabetes I have.
- How diabetes medicines work in my body.
- How to give myself insulin, if I need it. (reworded)
- How to monitor my blood sugar.
- How to recognize and treat high blood sugar.
- How to recognize and treat low blood sugar.

The staff will use three questions to teach me about Diabetes:

1. What is my main problem?
2. What do I need to do?
3. Why is this important to me?

The staff will ask me to repeat back important points in my own words, or ask me to show what I have learned. They want to make sure that I know about my disease and how to take care of myself.

What is my main problem?

I have diabetes. Diabetes means there is too much sugar (glucose) in my blood. When I digest my food, my body breaks down much of the food into sugar. My pancreas makes a hormone called insulin. Insulin helps to get the sugar from my blood into my cells. When my body does not have enough insulin, or it has trouble using insulin, sugar cannot get into my cells. Sugar builds up in my blood. High blood sugar is not good for my health. I need to understand how to self-manage my diabetes to stay in good health.

What do I need to do?

I need to understand what type of diabetes I have.

Types of diabetes

- Type 1 – My body is making little or no insulin. This usually begins during childhood or as a young adult.
- Type 2 – My body is not using insulin the way it should or is not making enough insulin.
- Diabetes caused by steroids.
- Diabetes caused by other conditions.

I need to know how to use carbohydrate counting to manage my diabetes.

Carbohydrate Counting/Healthy eating

- Know how carbohydrates affect my blood sugar level.
 - I need carbohydrates to give my body energy.
 - Carbohydrates increase my blood sugar levels more than any other nutrient.
 - Eating too many carbohydrates may cause high blood sugar.
 - Eating too few carbohydrates may cause low blood sugar.
 - Eating the right amount of carbohydrates at meals and snacks throughout the day helps control my blood sugar levels.

I need to understand how my diabetes medicines work in my body.

Oral Diabetes Medicines and Other Injectables (except insulin).

- The names and doses of my medicines.
 - I will know the name and dose of each medicine I am taking for diabetes.
- How my medicine works in my body.
 - Each of my diabetes medicines helps to control my blood sugar.
 - Each medicine does this in a different way.
 - It is important to know how the medicines I am taking work in my body.
- When to take my medicine.
 - Some of my medicine needs to be taken at certain times.
 - The time can depend on how the medicine works in my body, when I eat food, and how my body absorbs food.
 - I may have to take some medicines more than one time each day.
- Side effect of my medicines.
 - I will know what the side effects are for my medicines.
 - Each medicine I take for diabetes can have different side effects.
 - Common side effects are low blood sugar (hypoglycemia), stomach or intestinal problems, swelling in hands and feet and weight gain.
- Medicine assistance plans.
 - I understand that some programs help me pay for medicine if I qualify.
- Other injections (except insulin)
 - I understand that there are injections of medicines other than insulin that help to control my blood sugar.
 - It is important to know the proper dose and timing of these injections.
 - Possible side effects include nausea, weight loss and irritation at the injection site.
- I need to call my doctor if:
 - I am concerned about side effects I am having with my medicine.
 - My blood sugar is not within the recommended range.
 - I have any other concerns or questions about my medicine.
 - I have problems paying for my medicine.

I need to understand the type of insulin I am using and how to administer this insulin.

Insulin Usage

- Types of insulin, how they work and when to take them.
 - There are several types of insulin.
 - Each type of insulin works differently in my body.
 - When the insulin starts to work.
 - When the insulin works its best.
 - When the insulin stops working.
 - My doctor will tell me when to take my insulin.
- Vial and syringe
 - I need to know how to use a syringe.
 - I must fill the syringe with insulin from a vial.
 - My diabetes educator or nurse will show me the correct way to use the vial and syringe.
- Use of an insulin pen.
 - Insulin pens are another way to give insulin.
 - A pen needle is placed on the end of the pen. I dial the dose of insulin I need to take. Then I push the button at the end of the pen to deliver the insulin.
 - My diabetes educator or nurse will show me the correct way to use the insulin pen safely.
- Injection Site
 - I need to give my shot into fatty tissue just under the skin.
 - Locations include the stomach, buttocks, outer thighs, and the fatty part of the upper arms.
 - I need to rotate where I inject insulin into my body.
- Mixing insulin
 - Your doctor may prescribe more than one type of insulin for better blood glucose control.
 - Some insulin can be combined into one syringe and taken as one injection. Sometimes these can be bought already mixed.
 - If I need to mix insulin, my diabetes educator or nurse will show me the best way to do this safely.
 - If I am using Lantus or Levemir, I **cannot** mix them with any other insulin

- Storing insulin properly
 - Unopened vials of insulin or insulin pens should be stored in the refrigerator.
 - Once a vial or pen is opened, it can be stored at room temperature.
 - I will check with a pharmacist to find out how long my insulin can be stored.
- Disposal of needles
 - I need to dispose of my used syringes in a puncture proof container.
 - Empty laundry soap or bleach bottles work well.
- Insulin side effects
 - The main side effect of insulin is low blood sugar (hypoglycemia).
 - It is important that I know the signs and symptoms of hypoglycemia.
 - See the hypoglycemia section for more information.
- Insulin assistance plans
 - I understand that some programs help me pay for insulin if I qualify.
- When to call my doctor
 - I need to call my doctor if I have any questions about how to give my insulin or how much to take.
 - My blood sugar is not within the recommended range.
 - I have any other concerns or questions about my insulin.
 - I have problems paying for my insulin.

I need to understand how to check my blood glucose (sugar) with a meter and how to use the results.

Blood Glucose Checking (follow the directions for my meter)

- Getting a blood sample. I will:
 - Wash my hands with soap and water.
 - Put the test strip into the meter.
 - Poke my finger.
 - Put a drop of blood on the test strip.
 - Read my current blood sugar level.

- Dispose of the lancet (needle) in a puncture proof container.
- Place the test strip in the regular trash.
- Frequency and timing of testing
 - The frequency and timing of testing is different for everyone.
 - My diabetes educator or doctor will tell me how often and when I should test my blood sugar.
 - I should always check my blood sugar before driving or exercise.
- How to keep a record or log book of my blood glucose levels
 - It is important that I write my blood sugar levels in a logbook or chart and bring this with me when I go to the doctor.
 - This will help my doctor determine if I need any changes in my diabetes plan.
- Know what my blood glucose numbers should be.
 - The recommended blood sugar range can vary.
 - My doctor or nurse will tell me what my target blood sugar range should be.
 - An average blood sugar target range is 70 to 130 mg/dL before meals and less than 180 mg/dL two hours after the start of a meal.
 - I will call my doctor if I notice that my blood sugar is often outside of my target range.
- How to get supplies
 - I need to check with my insurance to find out where to get my supplies and how much they will cost me.
 - The cost of the meter and supplies will vary by insurance company.
 - My doctor will write a prescription for my blood sugar testing supplies.
 - I may need to go to a pharmacy or a durable medical supply company.

I need to understand the signs, symptoms, and treatment of high blood sugar

Hyperglycemia (High Blood Sugar)

- Signs and symptoms of high blood sugar may include:
 - Increased thirst
 - Frequent use of the bathroom
 - Feeling tired

- Blurred vision
- Possible numbness or tingling in hands or feet
- Poor healing of cuts or wounds
- Some causes of high blood sugar include:
 - Too much food
 - Too little or missing a dose of my diabetes medicine
 - Not exercising
 - Illness
 - Stress
 - Changes in other medicines I may be taking
- Actions to take for a high blood sugar.
 - If I have type 2 diabetes I will try to find the cause of my high blood sugar (too little medicine, too much food, too little activity, illness, or stress). If I notice repeated high blood sugar levels, I will contact my doctor.
 - If I have type 1 diabetes I will:
 - Check urine ketones if my blood sugar is greater than 240 mg/dL.
 - Call my doctor if I have moderate to large ketones in my urine.
 - Check my blood sugar every 2-4 hours.
 - Drink at least 8 oz. of fluids every hour, unless told otherwise by my doctor.
 - Follow my sick day plan given to me by my doctor as needed.

I need to understand the signs, symptoms, and treatments of low blood sugar.

Hypoglycemia (Low Blood Sugar)

- Signs and symptoms of low blood sugar may include:
 - Hunger
 - Headache
 - Sweaty
 - Dizzy
 - Shaky
 - Rapid heartbeat
 - Confusion
 - Irritability
- Causes of low blood sugar may include:

- Too much diabetes medications
- Not enough food
- Too much exercise
- Missing or delaying meals
- What is a low blood sugar?
 - A low blood sugar is 70 mg/dL or less.
 - I could experience symptoms of low blood sugar at levels higher than 70 mg/dL.
- If I have symptoms of low blood sugar, I will:
 - Test my blood sugar level.
 - Use the rule of 15 if my blood sugar is low.
 - Eat 15 grams of fast-acting carbohydrate and wait 15 minutes to re-test my blood sugar.
 - I will repeat this if my blood sugar remains below 70 mg/dL.
 - I will carry a fast-acting source of sugar, such as juice, glucose tablets, or soft candies, with me at all times.
- When to use a glucagon emergency kit.
 - If I have type 1 diabetes, my doctor may want me to have a glucagon emergency kit.
 - The glucagon emergency kit contains a shot that should be used if I cannot safely treat a low blood sugar with food, for example if I am unconscious.
 - I cannot give it to myself; someone will have to be trained to give it to me.

Why is this important to me?

How I manage my diabetes can improve how I feel. Knowing more about diabetes and what I can do to care for myself will help me manage my diabetes.

To help me understand diabetes, I may receive:

- Your Guide to Understanding Diabetes Management
- Diabetes Self-Care Tools Guide
- Nutrition packet
- Class packet
- Gestational packet
- Insulin pump packet
- Blood glucose meter

- Hyperglycemia pink handout
- Hypoglycemia blue handout
- How to count carbohydrates
- Choose your foods list
- Log book
- Glucose tab samples
- The Calorie King Calorie, Fat, and Carbohydrate Counter by Allen Boruschek
- Test Strips
- Syringes
- Pen Needles

Diabetes Education Plan

Resources for Staff

- Your Guide to Understanding Diabetes Management
- Understanding Diabetes (Pink Panther) - by H. Peter Chase, MD
- Understanding Insulin Pumps and CGMS (Pink Panther) – by H. Peter Chase, MD
- American Diabetes Association (ADA) Website – www.diabetes.org
- [Secondary Diabetes](#)- Nursing Reference Center Plus
- [Type 2 Diabetes](#)- Nursing Reference Center Plus
- [Type 1 Diabetes](#)- Nursing Reference Center Plus
- [Blood Glucose](#)- Nursing Reference Center Plus
- [The Importance of Carb Counting If You Have Diabetes](#)- Nursing Reference Center Plus

Teaching Tools (items given to the patient)

- Your Guide to Understanding Diabetes Management - (given inpatient and outpatient)
- Understanding Diabetes (Pink Panther) – by H. Peter Chase, MD (given inpatient and outpatient)
- Understanding Insulin Pumps and CGMS (Pink Panther) – by H. Peter Chase, MD (given outpatient)
- Nutrition Packet – (given outpatient)
- Class Packet – (given outpatient)
- Insulin Pump Packet – (given outpatient)
- Gestational Packet – (given inpatient and outpatient)

References

- American Association of Diabetes Educators (AADE) Website – www.diabeteseducator.org
- American Diabetes Association (ADA) Website – www.diabetes.org
- National Institute of Health (NIH) Website – www.nih.gov
- [Secondary Diabetes](#)- Nursing Reference Center Plus
- [Type 2 Diabetes](#)- Nursing Reference Center Plus
- [Type 1 Diabetes](#)- Nursing Reference Center Plus
- [Blood Glucose](#)- Nursing Reference Center Plus
- [The Importance of Carb Counting If You Have Diabetes](#)- Nursing Reference Center Plus

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Always close each teaching session with the question, “What questions do you have for me?”

***The last 2 pages are intended for staff use only. Do not give to the patient. This document is not a part of the permanent medical record.**