

Advanced 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:

- How what I eat affects my diabetes.
- Why exercise is important for managing my diabetes.
- What the chronic complications of high blood sugar are.
- How my feelings may affect my diabetes management.
- How to change my behaviors and seek support to help manage my diabetes.
- How to manage my diabetes when I am sick.
- How to manage my diabetes with an insulin pump.
- How to be safe at school with diabetes.

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 know how what I eat affects my diabetes.

- Know the foods that contain carbohydrates:
 - Grains: bread, cereal, crackers, noodles, rice, tortillas.
 - Starchy vegetables: corn, dried beans, legumes, peas, potatoes, sweet potatoes.
 - Fruits: fresh, canned or dried fruit, fruit juice.
 - Milk: milk, yogurt.
 - Sweets: cakes, cookies, desserts, ice cream, jam, jelly, regular pop, sugar, syrup.
 - Foods high in fiber: whole grains, fresh fruits and vegetables. They help slow down how fast carbohydrate is absorbed.
- Read food labels
 - I need to read the food labels on the foods I eat.
 - I need to check both the total grams of carbohydrate and the serving size.
 - I can use food lists to check the carbohydrate content of the foods I eat that do not have labels.
- Food portions

- I need to measure my food portions so I can figure out how much carbohydrate I am eating.
- My serving size may be different than the serving size listed on food labels or food lists.
- Carbohydrate counting
 - Counting the grams of carbohydrate in the foods I eat helps me manage my diabetes.
 - I can also count the ‘carbohydrate choices’ I eat. One ‘carbohydrate choice’ is equal to 15 grams of carbohydrate.
- Advanced carbohydrate counting
 - If I am taking insulin, I need to balance the amount of carbohydrate I eat with the amount of insulin I take to have a normal blood sugar level.
 - Advanced carbohydrate counting lets me change the amount of rapid-acting insulin I take based on the amount of carbohydrate I eat.
 - My doctor will tell me how many grams of carbohydrate are covered by one unit of rapid acting insulin. I need to take _____ units of insulin if I am eating _____ grams of carbohydrate.
- My personal meal plan
 - I need to eat 3 meals and 1 to 2 snacks every day.
 - I should eat at about the same time every day.
 - I need to eat the same amount of carbohydrate at each meal or snack every day.
 - My doctor or dietitian will tell me how many carbohydrates I should eat at meals and snacks:
 - Breakfast: _____
 - Lunch: _____
 - Dinner: _____
 - Snacks: _____
 - I should not skip meals.
 - I should eat a variety of foods.

I need to understand that exercise is important for diabetes management

Exercise and Diabetes

- Exercise may help:
 - Control my blood sugar.

- Keep me at a healthy weight.
- Keep my heart and blood vessels healthy.
- Lower my blood pressure.
- Increase my good cholesterol.
- Reduce stress.
- To exercise safely, I need to:
 - Talk to my doctor before I begin an exercise program.
 - Check my blood sugar. I may need to eat a snack before I exercise.
 - Wear a medical ID and comfortable shoes.
 - Carry a quick acting source of sugar with me. When I exercise, my blood sugar level can go down.
 - Check my blood sugar after exercise to see how my body responded.

I need to understand the chronic complications of high blood sugar.

Chronic (Long Term) Complications

- Good diabetes management will help prevent long term complications which may include:
 - Nerve damage (neuropathy)
 - Damage to my feet
 - Eye damage or blindness (retinopathy)
 - Damage to my heart and blood vessels
 - Dental problems
 - Kidney damage (nephropathy)
 - Poor healing of cuts and wounds
 - Sexual difficulties
- To reduce my risk of long term complications, I should have:
 - My weight and blood pressure checked, and a foot exam at every doctor's visit
 - My Hgb A1c checked every 3 months. This lab test lets my doctor and I know how well my diabetes is being managed.
 - A dilated eye exam, kidney function test, and blood fats yearly. Blood fats include triglycerides, total cholesterol, LDL cholesterol, and HDL cholesterol.
 - A flu shot yearly and other immunizations as advised by my doctor.

I need to understand how my feelings affect my diabetes management.

Make a plan for emotional concerns (psychosocial concerns)

- Feelings
 - Being told I have diabetes can make me feel sad, angry, guilty, or scared.
 - These feelings are normal.
 - Taking care of my diabetes is hard.
 - I can cope with diabetes but it may take time.
 - I can lead a normal, healthy, happy life with diabetes.
- Stress management/coping skills
 - Stress may cause my blood sugar to go up.
 - I need to have a plan to cope with stress. Both positive and negative life events can cause stress.
 - I need to recognize symptoms of stress which may include muscle tension, change in sleeping patterns, and change in appetite.
 - Some coping skills include taking a walk, listening to music, and talking with friends and family about my feelings.
- Depression
 - Depression is common in people with diabetes.
 - Some signs and symptoms of depression include lack of appetite, feeling sad, sleep problems, an irritable or anxious mood, lack of energy, loss of interest in usual activities, and feeling worthless.
 - I will talk to my doctor if I experience any of these.
- Diabetes at work and school
 - People with diabetes are protected by the Americans with Disabilities Act. If I am experiencing discrimination at work, I should call 1-800-DIABETES (800-342-2383) for help.
 - If I am experiencing difficulty managing my diabetes at school, I should contact my school office or the Intermediate School District office.
 - If I need special accommodations, my employer or school is required by law to work with me.
- Family support is very important for people with diabetes.
- Community Resources

- There are many community resources available for people with diabetes.
- My diabetes educator or doctor can provide me with a list of community resources or I can call 211.

I need to understand the behavior changes and support needed to help me manage my diabetes.

Promote Health and Behavior Change

- Seven self-care behaviors that help me manage my diabetes are:
 - Healthy eating
 - Being active
 - Monitoring my blood sugar
 - Taking medicines correctly
 - Problem solving in managing my diabetes
 - Reducing my risks
 - Healthy coping
- Resources available to help manage my diabetes are:
 - My doctor
 - The Bronson Diabetes Education Center staff - (269) 341-8585
 - Diabetes support groups- call Bronson Diabetes Education Center staff for more information – (269) 341-8585
 - Websites – www.diabetes.org and www.dlifetv.org
 - Diabetes magazines and books
- I will develop a diabetes self-care support plan. This plan helps me manage my diabetes. My plan may include family, friends, health care professionals, reliable internet sites, support groups, educational meetings, and additional community resources.

I need to understand how to manage my diabetes when I am sick.

Sick Day Plan

When I am sick I will:

- Still take my diabetes medicine(s) or insulin.
- Test my blood sugar every 2 to 4 hours.
- Eat foods from my meal plan if I can.
- Drink fluids:
 - If my blood sugar is more than 240 mg/dL, I will drink about ½ cup of sugar-free fluid every 30 to 60 minutes.

- If my blood sugar is less than 240 mg/dL, I will drink about ½ cup of fluid that contains carbohydrate. If I am sick to my stomach, I will sip fluid slowly.
- Check my urine ketone levels if I have **type 1 diabetes**. Ketones may cause:
 - Frequent urination.
 - Thirst.
 - Breathing fast.
 - Nausea.
 - Stomach cramping or vomiting.
 - Shortness of breath.
 - Fruity smelling breath.
 - Muscle aches or stiffness.
 - Confusion.
- Let a friend or family member know I am not feeling well so they can check on me every 1 to 2 hours.
- Call my doctor:
 - If my blood sugar is more than 240 mg/dL for 2 days in a row.
 - If my ketone levels are “moderate” or “large”.
 - If I have a fever, nausea, or I am vomiting.
 - Before taking any over-the-counter or herbal medicines.

I need to understand how to manage my diabetes with an insulin pump

Insulin Pump

- How the insulin pump works
 - My insulin pump uses only quick-acting insulin: Novolog, Humalog, or Apidra.
 - My insulin pump is set to deliver basal (background) insulin and bolus (meal time and correction) insulin.
 - My educator will teach me how to program my insulin pump with my personal settings.
 - My pump has alarms that will tell me if my pump is not infusing insulin. I will be taught how to respond to them.
- Using the basal rate and bolus feature.
 - My pump will deliver my basal rate throughout the day according to my settings.
 - I can have several different basal rates.

- I will test my blood sugar and count my carbohydrates. I will enter my blood sugar level and carbohydrates into the pump. My pump will calculate and deliver my bolus and correction dose based on my settings.
- When my blood sugar is over 240 mg/dL:
 - I am at risk for ketoacidosis.
 - I need to check my ketones and give a correction dose of insulin through the pump.
 - I will re-check my blood sugar in 1 hour.
 - I will give an injection of insulin that is equal to my correction dose with a syringe and change my insertion site, if my blood sugar is not coming down.
- Changing insertion site
 - It is important to change my insertion site every 2-3 days to prevent infection.
 - I will not change my site at bedtime so I can be sure it is working right before I go to sleep.
- If I have problems with my insulin pump, I can contact:
 - The insulin pump company 24 hours a day. The telephone number is on the back of the pump
 - My doctor.
 - Bronson Diabetes Education Center at (269) 341-8585.

I need to understand how to be safe at school with diabetes

School Management

- Children with diabetes are covered by federal laws to make sure they are safe at school. These laws help make sure they have the same educational opportunities as other students.
- Parents, the child, and all school staff who care for the child with diabetes help make sure diabetes management continues at school.
- The school staff need to know:
 - What diabetes is
 - How to check blood sugar
 - Signs and symptoms of high and low blood sugar
 - How to treat low blood sugar
 - Use of glucagon
 - How and when to check for ketones
 - When to call 911

- How to count carbohydrates
- The action of insulin
How to give insulin
- How activity affects blood sugar
- How much insulin to give for food or high blood sugar based on the child's medical management plan. This plan is made by the child's doctor and parent(s) and should be given to the school.
- I will contact the school office if my child's medical management plan changes.

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?”

***These 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.**