

The Gulf Coast Center self paced study guide for working with individuals with Diabetes

Instructions for this training:

1. Program Directors supervising direct care staff are required to assure that **all staff working with individuals with Diabetes** have completed this training packet.
2. You will be required to document that you have completed this training.
3. A quiz will be taken at the conclusion of this training packet.
4. This training should be completed prior to the first day working with the person with diabetes.
5. This training must be completed annually by all staff working one on one with persons with diabetes.

Purpose of this training:

- To ensure the health and safety of the consumers with diabetes in our care.
- To prepare staff to meet the needs of the consumers with diabetes in our care.

Overview of Diabetes

- It is a chronic illness.
- The pancreas does not make insulin or the body does not effectively absorb insulin.
- Insulin helps the body utilize food by converting sugar (glucose) into energy.
- Without insulin, sugar accumulates in the blood stream and will cause symptoms.

Treatment

- Taking multiple injections of insulin or treating the insulin resistance.
- Testing blood sugar several times during the day.
- Eating a balanced diet including all food groups.
- Following a regular exercise program.

The goals of treatment are to:

- promote normal childhood/adolescent growth and development.
- promote healthy emotional well-being.
- maintain a balance between insulin, food, and exercise.

The challenges of living with diabetes:

- Physical – how the body deals with the manifestations of high and low blood glucose
- Emotional – Frustration and struggles imposed on them by the illness
- Practical – Scheduling everything
- Systemic – Impact of illness on family, friends, etc.

Blood Sugar Testing is required:

- Research has shown that maintaining good control of blood sugar levels can prevent long-term complications of diabetes.
- Procedure involves pricking a finger and placing a drop of blood on a test strip.
- Strip placed in monitor and gives a digital readout of current blood sugar level.
- Testing is often performed 3-4 times daily.

What is a “Low Blood Sugar?” (Hypoglycemia)

- Defined as a blood sugar level tested less than 80 mg/dl.
- The person may feel “low” and as a result exhibit behavior changes.
- A low blood sugar episode does not feel good and may be frightening to the person.

Emergency action may be needed for a diabetic student:

- Low blood sugar can develop within minutes and requires immediate attention!
- Never send a person with suspected “low blood sugar” anywhere alone.

What are the causes of a “Low Blood Sugar?”

- Late food or too little food
- Too much exercise
- Too much insulin
- A planned or unplanned activity without additional food
- A viral or bacterial illness

Signs/symptoms of “Mild Low Blood Sugar” may include one or many of the following symptoms:

- Hungry
- Shaky
- Dizzy
- Sweaty
- Pale
- Increased heart rate
- Anxiousness
- Irritability
- Weakness, tiredness
- Inability to concentrate
- Personality change

Treatment of “Mild Low Blood Sugar”

- Individual treats self, depending on the age of the consumer and parent/physician instruction.
- Ingests quick sugar source such as 2-3 glucose tabs, 4-8 oz. Juice, glucose gel, 4-8 oz. Regular (not diet) soda, or 3-8 Lifesavers.
- Continue to treat until blood sugar is above 80.

What are the Signs/symptoms of “Moderate Low Blood Sugar?”

- Headache
- Behavior changes
- Poor coordination
- Confusion
- Blurry vision
- Weakness
- Slurred speech
- Inability to make decisions

The Treatment of “Moderate Low Blood Sugar” includes:

- Staff assistance typically.
- Insist on person swallowing a quick sugar source such as 2-3 glucose tabs, 4-8 oz. Juice, glucose gel, 4-8 oz. Regular (not diet) soda, or 3-8 Lifesavers.
- Continue to treat until blood sugar above 80.

What are the Signs/symptoms of “Severe Low Blood Sugar?”

- Loss of consciousness
- Seizure

Treatment of “Severe Low Blood Sugar” requires:

- Calling 911, immediately.
- Position on side, if possible.
- Don't attempt to give anything by mouth.
- Glucagon (an injection) may be given by nurse if prescribed and available or the parents if he/she arrives before 911.

What is the follow-up management for mild and moderate “Low blood sugars?”

- Wait 10-15 minutes
- Repeat food if symptoms persists or blood sugar remains less than 80 (if known).
- Follow with snack of complex carbohydrate and protein (e.g., crackers and cheese) according to licensed health care providers orders.
- Follow individual health care plan for diabetics that are specific to individual and developed by the parent and licensed health care provider.

Typically, the Physician or their nurse will be called to direct staff in the treatment follow-up as this treatment requires nursing licensure, self care if orders indicate person is independent or given by Physician or parent.

If You Have a Way to Check Blood Sugar and the person is able to complete the task, have them do so.... BUT, ALWAYS WHEN IN DOUBT, TREAT AS A LOW BLOOD SUGAR WITH QUICK SUGAR SOURCE!

What is the definition of a “High Blood Sugar?” (Hyperglycemia)

- Defined as a blood sugar level greater than 240 mg/dl.
- May occur quickly with viral or bacterial illness.
- Pattern of high blood sugar indicates the need for evaluation of management.

What are the causes of “High Blood Sugars?”

- Too much food
- Too little insulin
- Decrease activity
- Bacterial or viral illness

What are the Signs/symptoms “Mild High Blood Sugar?”

- Thirst
- Frequent urination
- Fatigue/sleepiness
- Increased hunger
- Loss of concentration
- Blurred vision
- Sweet breath
- Urine Ketones (varies from 0 to small)
- Note undiagnosed children may exhibit some or all of these signs, plus weight loss.

Treatment for a “Mild High Blood Sugar” involves:

- Drinking zero-calorie fluids (i.e., water.)
- Check urine ketones, if test strips available.
- Increase activity level briefly (i.e., walk around) if ketones are not present.
- Decrease activity if ketones are present.

What are the signs/symptoms of a “Moderate High Blood Sugar?”

- Mild symptoms plus
- Dry mouth
- Nausea
- Stomach cramps
- Vomiting
- Urine ketones (moderate to large)

What is the treatment for a “Moderate High Blood Sugar?”

- Drink zero-calorie fluids, as tolerated.
- Check urine ketones, if test strips available.
- Decrease activity.
- Call parent.
- Anti-nausea suppository, if prescribed (only licensed nurse can administer).

What are the signs/symptoms of a “Severe High Blood Sugar?”

- Labored breathing
- Very weak
- Confused
- Unconscious
- Urine ketones (moderate to large)

What is the treatment for “Severe High Blood Sugar?”

- Call 911
- Call parent

Special Considerations for the people in Respite setting

- Diabetic consumers may need to use the bathroom frequently and should be allowed to do so.
- High blood sugar is characterized by excessive thirst. It is important to drink plenty of water and it may be helpful for the person to use a water bottle if leaving the house.

What about Nutrition, Meal Planning, and Snacks at Respite?

- Structured meals and snacks help promote optimal blood glucose control and help prevent the incidence of low blood sugar levels during the Respite stay.
- A meal plan is not a diet, but a guide to assist children/families with diabetes in choosing appropriate meals and snacks.
- Children with diabetes are children first and their needs and favorite foods will mirror other children their age.

What is the role of Carbohydrate foods in the diet?

- Most important aspect of the meal plan.
- Consistency in amounts eaten at each meal and snack makes it easier to fine-tune insulin doses.
- Main source of blood glucose – approx. 90-100% enters the blood stream as glucose 15 min.-2 hours after eating.
- Includes bread and starches, fruit, and milk.

What is the purpose of Proteins in the diet?

- Approx. 50-60% of dietary protein is converted to glucose and released into the blood stream 2-5 hours after meal.
- Include meat, fish, poultry, eggs, peanut butter, cheese, and meat alternatives.
- Adds 'staying power' to the meal.
- Protein food at breakfast may reduce low blood sugar before lunch.
- Protein food is recommended at lunch.

What about Fats in the diet?

- They have negligible (less than 10%) effects on blood sugar levels.
- Delays and slows the digestive process.

How does sugar effect the diet?

- Sugar is ok and not a poison.
- Sugar is acceptable in a diabetes meal plan.
- Research has shown that sugar does not dramatically elevate blood sugar levels. It acts similarly to other carbohydrates such as potato or bread.
- Foods containing sugar should be treated as part of the carbohydrate foods allowed in the person's meal plan.

Matching Food/Insulin Action

- people generally need 3 meals and 2-3 snacks each day.
- Eating 4-5 hours apart with snacks 2-3 hours after the previous meal almost always matches the peak times of insulin action.
- Almost all people receive a combination of a quick-acting insulin and an intermediate or long-acting insulin before breakfast.

What about Exercise and Sports?

- A great way for a person to stay in shape, spend time with friends, build self-confidence, have fun, and help blood sugars stay within an acceptable range.

Suggestions for Exercising and sports:

- People should be allowed to check blood sugar before, during, or after exercising.
- Eat before intensive exercising.
- Have extra snacks available during exercise to prevent low blood sugar (i.e., Gatorade, cheese and crackers.)
- Always have quick-acting sugared food/beverages available for managing low blood sugar.
- Plan ahead for known increased exercise at an unusual time such as walk-a-jog-a-thon or mile run.

The Law and Diabetes

- Diabetes is considered a disability under federal law.
- People with diabetes must have full access to all activities, services, or benefits provided for all people.

Suggested accommodations for the Respite setting:

- Respite administrator, physician or nurse, parents and the individual should mutually determine the most appropriate location for blood sugar monitoring and insulin administration.
- Person may have permission to do blood sugar testing as desired.
- Person may also need to check sugar on field trips or during special events.
- Parents are responsible to supply special snacks for Respite.
- Person should have at least one additional snack readily available for emergency consumption.
- Person needs to be allowed to snack when and where necessary to maintain adequate blood sugar levels.
- A person who does not respond to a snack and/or exhibits signs of low blood sugar needs to be accompanied to a bedroom, or a call for assistance should be made from their current location.
- A person must be allowed to drink water or other sugar-free fluids in the classroom, as needed, to dilute high blood sugars.
- A person needs to be allowed extra bathroom privileges as high blood sugars result in increased urine output.
- A person with high blood sugar will receive insulin according to orders from his/her health care provider. The person may be allowed to self-inject in the respite facility, if appropriate and determined in advance with input from the physician or nurse.
- When the person experiences either a high blood sugar reaction or a low blood sugar reaction, his/her thought processes are likely to be adversely affected. Therefore, accommodations will need to be made with regards to performance expectations during the time immediately before and for at least one hour after the episode is treated.
- Instructions may have to be repeated as memory difficulties may be the result of high or low blood sugar levels.
- Families should be given notice of extra events such as parties or “outings.”

Typical Questions/Concerns of Parents

- Who will monitor the health of my family member during Respite?
- How can I reach my family members provider?
- Will my family members provider know anything about diabetes?
- What about the diabetes supplies?
- What about snacks at Respite?
- What will happen when there are special occasions such as parties, outings, etc.?

The Gulf Coast Center self paced study guide for working with individuals with Diabetes Quiz

You must fill out the following information:

First Name:	<input type="text"/>
Last Name:	<input type="text"/>
Answer the following Questions by checking the appropriate box on the right.	
1. As a service provider, I am required to provide accommodations to the individual with Diabetes in my care?	<input type="checkbox"/> True <input type="checkbox"/> False
2. What should I do if a person with a diagnosis of diabetes falls asleep in my presence?	<input type="checkbox"/> Do nothing <input type="checkbox"/> Attempt to awaken the person as soon as I become aware
3. The symptoms of a low blood sugar may include shaking, confusion, sweating, or even unconsciousness.	<input type="checkbox"/> True <input type="checkbox"/> False
4. A blood sugar that is either high or low, can significantly affect an individuals ability to function?	<input type="checkbox"/> True <input type="checkbox"/> False
5. I should never leave a person who I suspect is (or that states they may be) experiencing a low blood sugar unattended.	<input type="checkbox"/> True <input type="checkbox"/> False
6. If a person is unable to consume a sugar source due to their inability to swallow, I should not give anything by mouth and call 911	<input type="checkbox"/> True <input type="checkbox"/> False