



# Diabetic Review

*For School Staff*





# Diabetes Basics

## *Diabetes:*

- is a disease where the body does not produce insulin or does not use insulin properly. It is an endocrine system disorder.

## *Insulin:*

- is a hormone normally made by the body. It helps glucose (sugar) enter cells where it can be used for energy.

## *Without Insulin:*

- glucose remains in the body stream and cannot be used for energy by cells.

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# Diabetes Basics Cont....

*Two Main Types of Diabetes*

What is Diabetes?



When pancreas doesn't produce insulin  
(Type 1)



When pancreas doesn't produce enough insulin or the insulin cannot be processed  
(Type 2)

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# Diabetes Basics Cont....

- Sometimes blood glucose levels are too high resulting in a condition called **hyperglycemia**.
  - If this happens, insulin must be administered to lower the blood glucose levels.
  - **Insulin administration** for children with Type 1 diabetes is essential for survival.

# Symptoms of Hyperglycemia

- Dry mouth
- Thirsty
- Hungry
- Frequent urination
- Flushed
- Headache
- Nausea and vomiting
- Sweet smelling breath
- Seizures
- Coma



# Insulin

- Insulin is given by injection
- An injection can only be delegated to a UDA
- Overseeing a child who is giving themselves insulin via insulin pump or insulin pen is a delegated task
- Unopened insulin is stored in the refrigerator

# Diabetes Care in Schools

- **Emergency Care Plan/IEP:** Summarizes symptoms and treatments for hypoglycemia/hyperglycemia and provides emergency contact information.
- The school nurse is the most appropriate person to provide routine and emergency care when needed.
- However, a school nurse is not always available, and hypoglycemia can occur at ANY time.



# Hypoglycemia (Low Blood Glucose)



- **Hypoglycemia** poses the most immediate risk to a student with diabetes because onset is sudden, it is not always preventable, and may progress to unconsciousness and convulsions if left untreated.



# Symptoms of Hypoglycemia

- Hunger
- Fatigue
- Shakiness
- Weakness
- Rapid pulse
- Confusion
- Cold clammy skin
- Seizures
- Loss of consciousness

# Hypoglycemia Cont.... (Low Blood Glucose)

## Hypoglycemia – Possible Causes:

- Too much insulin
- Too little food or delayed meal/snack
- Extra physical activity
- Illness
- Medications
- May occur for no apparent reason

# Mild and Moderate Hypoglycemia

When mild or moderate symptoms occur, ***immediate treatment*** is required to prevent progression to severe hypoglycemia:

- Treat at onset of symptoms by having student eat or drink fast acting carbohydrates (if able to swallow)
- NEVER leave the student unattended

# Severe Hypoglycemia

If a student exhibits unconsciousness or unresponsiveness, seizures(convulsions), or is unable to swallow, this is an **EMERGENCY:**

- Administer glucagon as prescribed
- **Call 911**
- Contact school nurse
- Contact parent
- Treat on the spot and **NEVER** leave the student unattended
- Emergency medication



# Glucagon for Hypoglycemia

- [https://www.google.com/search?q=glucagon+use+video&rlz=1C1GCEU\\_enUS968US969&oq=glucagon+use+video&aqs=chrome..69i57.4728j0j7&sourceid=chrome&ie=UTF-8#kpvalbx=\\_Ue0xY4bnEPLdptQPvtyFmA\\_w\\_21](https://www.google.com/search?q=glucagon+use+video&rlz=1C1GCEU_enUS968US969&oq=glucagon+use+video&aqs=chrome..69i57.4728j0j7&sourceid=chrome&ie=UTF-8#kpvalbx=_Ue0xY4bnEPLdptQPvtyFmA_w_21)



# Gvoke for Hypoglycemia

- <https://youtu.be/9RxvgQjFwl4>



# Baqsimi for Hypoglycemia

- <https://www.baqsimi.com/how-to-use-baqsimi>



# Next Steps

- Remain with the student until emergency medical services assumes control.
  - The student should not resume normal activities.
- Notify appropriate parties of the incident



# Don't Be Surprised If.....

- The student does not remember being unconscious or is incoherent or lethargic.
- The student feels nauseated, vomits or has a headache.

# Quick Review!

- Mild to moderate hypoglycemia can be treated with a quick acting source of carbohydrate (15 grams).
- Signs of severe hypoglycemia include:
  - Unconsciousness
  - Seizures
  - Inability to swallow

# Quick Review! (Cont....)

- Severe hypoglycemia is a medical emergency.
- Administer the glucagon
- Call 911
- Treat, then follow the Emergency Action Plan.

# Oral Hypoglycemia Agents

- Oral hypoglycemia agents are used to treat Type II diabetes and sometimes are added to treatment of Type I diabetes.
- Give 30 minutes before a meal.
- Skip the dose if a meal is skipped

# References

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