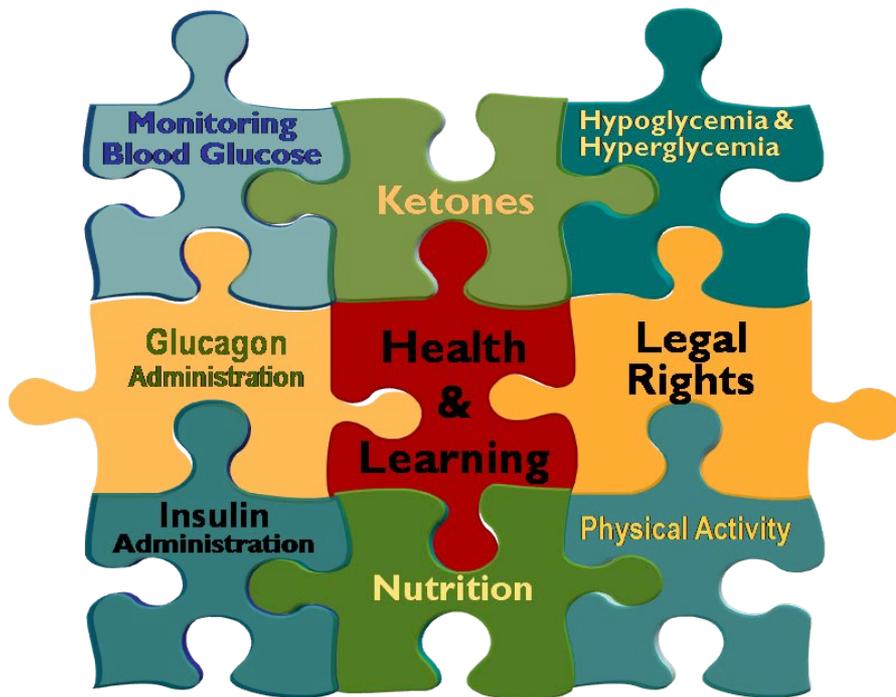


# DIABETES CARE TASKS AT SCHOOL: What Key Personnel Need to Know



**HYPOGLYCEMIA**

# Goal: Optimal Student Health and Learning



Managing hypoglycemia is a vital piece of a comprehensive plan.

# Learning Objectives

Participants will be able to understand:

- *Symptoms of low blood glucose*
- *Treatment of low blood glucose*
- *Prevention of low blood glucose*
- *Short- and long-term risks and complications*

# Vocabulary

**Glucose** - simple sugar found in the blood; fuel that all body cells need to function

**HYPoglycemia** - a LOW level of glucose in the blood

**Quick-acting glucose** - sources of simple sugar that raises blood glucose levels, like juice, regular soda, glucose tabs or gel, hard candy

**Glucose tablets or gel** - special products that deliver a pre-measured amount of pure glucose. They are a fast-acting form of glucose used to counteract hypoglycemia

**Carbohydrate** - source of energy for the body which raises blood glucose level

**Glucagon** - hormone given by injection that raises level of glucose in the blood

# **HYPONglycemia = LOW Glucose (sugar)**

## **Onset:**

- *sudden, must be treated immediately*
- *may progress to unconsciousness if not treated*
- *can result in brain damage or death*

## **DMMP should specify signs and action steps at each level of severity:**

- *mild*
- *moderate*
- *severe*

# Hypoglycemia: Risks & Complications

- Early recognition and intervention can prevent an emergency
- Greatest immediate danger
- Not always preventable
- Impairs cognitive and motor functioning

# Hypoglycemia: Possible Causes

- Too much insulin
- Too little food or delayed meal or snack
- Extra/unanticipated physical activity
- Illness
- Medications
- Stress

# Hypoglycemia: Possible Signs & Symptoms

## Mild Symptoms

Hunger	Sleepiness
Shakiness	Changed behavior
Weakness	Sweating
Paleness	Anxiety
Blurry vision	Dilated pupils
Increase heart rate or palpitations	

## Moderate to Severe Symptoms

Yawning	Confusion
Irritability/frustration	Restlessness
Extreme tiredness/fatigue	Dazed appearance
Inability to swallow	Unconsciousness/coma
Sudden crying	Seizures

# Mild/Moderate Hypoglycemia: What to do

## Intervene promptly; follow DMMP:

- Check blood glucose if meter is available.
- If no meter is available, treat immediately, on the spot.
- **NEVER send a student with suspected low blood glucose anywhere alone**
- When in doubt, always treat. If untreated may progress to more serious events.
- Consider “Rule of 15”

## “Rule of 15”

### **General guidelines, follow DMMP for each student:**

- Have student eat or drink fast acting carbs (15g)
- Check blood glucose 10-15 minutes after treatment
- Repeat treatment if blood glucose level remains low or if symptoms persist
- If symptoms continue, call parent/guardian per DMMP

# Quick Acting Glucose for Mild/Moderate Hypoglycemia

## Treatment for Lows: 15 g Carbohydrate

- 4 oz. fruit juice
- 15 g. glucose tablets (3-4 tablets)
- 1 tube of glucose gel
- 4-6 small hard candies
- 1-2 tablespoons of honey
- 6 oz. regular (not diet) soda (about half a can)
- 3 tsp. table sugar
- One-half tube of cake mate

# Severe Hypoglycemia Symptoms

- Convulsions (seizures)
- Loss of consciousness
- Inability to swallow

# Severe Hypoglycemia: What To Do

**Rare, but life threatening, if not treated promptly:**

- Place student on his or her side
- Lift chin to keep airway open
- Inject glucagon, per student's DMMP
- Never give food or put anything in student's mouth
- Call 911, then parent/guardian
- Student should respond in 10 to 20 minutes
- Remain with the student until help arrives

# Hypoglycemia: Prevention

- Physical activity, insulin, eating, checking BG, *per schedule*.
- Keep a quick-acting sugar source with the student. **ALWAYS.**
- Treat at onset of symptoms
- Ensure reliable insulin dosing, per DMMP.
- Ensure insulin dosing matches food eaten.
  - *Watch picky eaters*
  - *Provide nutritional information to parent/guardian*
  - *DMMP may specify after-meal dosing*

# Hypoglycemia: Prevention

- Consult with parent/guardian or school nurse when snack, meal or physical activity times must be changed.
- Monitor blood glucose variations on gym days.  
An extra snack may be required ½ hour before gym or during prolonged vigorous physical activity per DMMP.
- A student should never be unattended when a low blood glucose is suspected. Maintain adult supervision.

# Information for Teachers

- Students with hyperglycemia or hypoglycemia often do not concentrate well.
- Students should have adequate time for taking medication, checking blood glucose, and eating.
- During academic testing, provide accommodations as per 504 plan or IEP
  - *Check blood glucose before and during testing, per plan*
  - *Access to food/drink and restroom*
  - *If a serious high or low blood glucose episode occurs, students should be excused with an opportunity for retake*

# “Make the Right Choice the Easy Choice”

## **Eliminate barriers to diabetes management:**

- Become familiar with and follow students’ written plans
- Eliminate barriers to:
  - *Snacking*
  - *Blood glucose checks*
  - *Access to water and bathrooms*
  - *Insulin administration*
- Avoid judgments based on individual blood glucose readings
- Communicate with parent/guardian and school nurse