



Policy Name  HYPOGLYCEMIA TREATMENT	Policy Number: <b>0233</b>
	Effective Date: September 15, 2009
Approved By: Management Committee	Date Revised:
Classification: Pain and symptom management	Page No: Page 1 of 3

## **POLICY**

To ensure that treatment for hypoglycemia is rendered quickly and effectively, treatment may be initiated without a physician's order except if needed Intramuscular and subcutaneous, please see procedure point # 3. Blood glucose testing may be done at the Registered Nurse's discretion to identify hypoglycemia in a resident. All episodes of hypoglycemia should be reported to the attending physician.

Hypoglycemia (low blood sugar) can be classified as **mild** (blood sugar ≤ 4 mmol/l), **moderate** or **severe** (blood sugar < 2.8 mmol/l). Symptoms can include:

MILD (Blood sugar ≤ 4 mmol/l)	MODERATE	SEVERE (Blood sugar <2.8 mmol/l)
o tremors	<ul><li>headache</li></ul>	<ul> <li>unable to recognize and/or</li> </ul>
<ul> <li>tachycardia</li> </ul>	<ul> <li>mood changes</li> </ul>	treat hypoglycemia by self
<ul><li>diaphoresis</li></ul>	<ul> <li>irritability</li> </ul>	<ul> <li>disorientation</li> </ul>
<ul><li>paresthesia</li></ul>	<ul> <li>inability to concentrate</li> </ul>	o conscious or unconscious
<ul> <li>excessive hunger</li> </ul>	<ul><li>tiredness</li></ul>	o seizures
o pallor		
o shakiness		

Glucose tablets are the treatment of choice for residents who are able to chew and swallow. If the resident is unable to chew but can swallow, juice or Insta-Glucose gel can be administered. For residents who cannot swallow or are unconscious, Glucagon subcutaneously or intramuscular can be given according to the Goals of Care Designation and/or if resident and/or family/health advocate are in agreement (refer to procedure section 2).

Wait 15 minutes following administration of a fast-acting glucose supplement prior to retesting blood glucose or administrating an additional food supplement. Adding food supplements too soon following administration of a fast-acting glucose supplement will slow the absorption of the glucose and delay its effect on raising the blood sugar.

Agapé Hospice recognizes that a resident, and/or their family/health advocate have the right to make choices concerning his/her care and may refuse blood glucose testing and treatment of hypoglycemia. Should this choice be made, the RN must ensure that the resident and/or family/health advocate is aware of the possible consequences and outcome of not receiving treatment for hypoglycemia. The RN must document this information in the progress note section of the resident's health record.





Policy Name

HYPOGLYCEMIA TREATMENT

Policy Number: **0233** 

Page No:

Page 2 of 3

# **PROCEDURE**

#### 1. Conscious resident able to chew and swallow

- 1.1. Confirm hypoglycemia with a glucometer reading.
- 1.2. Treat **mild to moderate** hypoglycemia with oral intake of **15 grams** of carbohydrates, preferable as glucose or sucrose tablets or solution. Treat **severe** hypoglycemia with **20 grams** of carbohydrates.

# NOTE: 15 grams of carbohydrate is equivalent to:

- 15 grams of glucose (3 BD glucose tablets or 5 Dextrosol tablets) or
- ¾ cup (175 milliliters) of juice, lemonade sweetened with sugar or regular pop or
- 6 Lifesavers (chew and swallow) or 6 jelly beans or
- 3 teaspoons (15 milliliters) or 3 packets of sugar dissolved in 2 ounces (60 milliliters) of water or
- 1 tablespoon (15 milliliters) of honey or corn syrup

# 20 grams of carbohydrate is equivalent to:

- 4 BD glucose tablets or 7 Dextrosol tablets or
- 1 Cup (250 milliliters) juice or lemonade sweetened with sugar or regular pop or
- 8 Lifesavers (chew and swallow) or 8 jelly beans or
- 4 teaspoons (20 milliliters) or 4 packets of table sugar dissolved in 2 ounces (60 milliliters) of water or
- 4 teaspoons (20 milliliters) of honey or corn syrup
- 1.3. Wait 15 minutes and retest the blood sugar level.
- 1.4. If blood sugar remains ≤ 4 mmol/l, retreat with another 15 grams of carbohydrate.
- 1.5. Wait another 15 minutes, retest the blood sugar.
- 1.6. Retreat with another 15 grams of carbohydrate if blood sugar remains ≤ 4 mmol and contact the attending physician or designate.
- 1.7. If the next meal is greater than an hour away, provide a snack, including 15 grams carbohydrate and 1 protein source, to prevent repeated hypoglycemia.

# NOTE: 1 protein is equivalent to:

- 120 milliliters of milk or
- 25 grams of cheese or
- 15 milliliter portion of peanut butter





Policy Name

## HYPOGLYCEMIA TREATMENT

Policy Number:

0233

Page No:

Page 3 of 3

- 2. Document in the progress notes section of the resident's health record
  - 2.1. Time of hypoglycemia event
  - 2.2. Symptoms experienced by the resident
  - 2.3. Blood sugar readings and times
  - 2.4. Treatment given
  - 2.5. Resident's response to treatment
  - 2.6. Physician's notification

#### 3. Other:

## ONLY USE THIS PROTOCOL IF ORDERED BY PHYSICIAN

## Unconscious resident / conscious resident unable to chew or swallow

- Notify the physician for goals of care and further orders
- Confirm hypoglycemia with a glucometer reading.
- Turn resident on their side to prevent aspiration.
- Give Glucagon subcutaneously or intramuscular if ordered by the physician or designate and if it is in accordance with the Goals of Care Designation and the resident's and/or family/health advocate's goals of care. The usual dose for Glucagon is 1 milligram.

#### **CROSS-REFERENCE**

Policy 0235 - Blood Glucose Monitoring

#### REFERENCES

Alberta Health Services, Calgary Health Region-Treatment of Hypoglycemia, Policy H-1 Canadian Diabetes Association-2008 Clinical Practice Guidelines Expert Committee-Hypoglycemia

Canadian Diabetes Association-Hypoglycemia Practical Tips for People with Diabetes and Chronic Kidney Disease-December 2008