

## ***Louisiana Pharmacists Association Educates Patients about Hypoglycemia***

November is American Diabetes Month sponsored by the American Diabetes Association (ADA). The goal of American Diabetes Month is to shine a spotlight on a chronic disease that over 30.3 million Americans have been diagnosed with. Diabetes mellitus is broadly differentiated into type 1 and type 2, depending upon the amount of insulin produced by the pancreas, and how effectively the body uses that insulin. Insulin is a hormone that regulates the movement of sugar into cells. Type 2 diabetes is a result of the body becoming resistant to insulin or when the pancreas stops producing enough insulin. It most commonly affects adults, but it is becoming more common in children as childhood obesity increases. Changes in diet, exercise and weight loss are usual first-line therapy, but oral anti-diabetic drugs or insulin injections may be required for optimal blood sugar control.

Hypoglycemic symptoms can occur when a patient's blood sugar drops below what is a normal level for the patient. However, a glucose level of less than or equal to 70 mg/dL detected on a home glucose monitor should be treated with the "Rule of 15", which will be discussed in the next section. Common symptoms of hypoglycemia include: shaking, sweating, irritability, confusion, hunger, feeling weak, or fast heartbeat. Symptoms of hypoglycemia are most likely to be experienced if a patient is currently taking any of the following medications: insulin, glyburide (Glynase), glipizide (Glucotrol or Glucotrol XL), glimepiride (Amaryl), nateglinide (Starlix), or repaglinide (Prandin). Patients should check their blood sugar at least once daily in order to prevent severe hypoglycemic episodes if they are on any of those medications. Certain situations may also increase the risk for hypoglycemia. These situations include: fasting for a medical test or procedure, delayed meals, or exercise (during or after). Blood glucose should be monitored more closely during these types of situations.

The "rule of 15" is a commonly used method for treating hypoglycemia. To treat hypoglycemic symptoms or a glucose level is at or below 70 mg/dL, patients should eat 15 grams of carbohydrates then wait 15 minutes, and then check their blood sugar again. If it is below 100 mg/dL, repeat the previous step. If it is above 100 mg/dL and the next meal is over one hour away, patients should eat a small snack consisting of a starch and a protein (ex: 1 tbsp peanut butter and 6 crackers). Examples of 15 grams of carbohydrates are as follows:

- 3 to 4 glucose tablets
- 1 tube of glucose gel
- 1 cup of nonfat milk
- ½ can of regular soda
- 5 tablespoons of raisins
- 2 tablespoons of honey or sugar

If symptoms are still occurring or the blood sugar is not above 100 mg/dL after eating 15 grams of carbohydrates twice, emergency services should be notified.

Monitoring changes in day-to-day symptoms can help patients prevent having to go to the emergency room for severe episodes of hypoglycemia. Severe hypoglycemia is very dangerous and is considered a medical emergency. Following the rule of 15 and monitoring blood sugars

daily can to prevent hospital stays as well. Preventing hypoglycemia will not only positively impact a patient's diabetes disease course, it will also improve quality of life.

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