1. Type 1 Diabetes Information

- (a) Type 1 diabetes in children is an autoimmune disease that can be fatal if untreated, and the guidance provided in this information sheet is intended to raise awareness about his disease.
- (b) Type 1 diabetes usually develops in children and young adults, but can occur at any age.
 - According to the U.S. Centers for Disease Control and Prevention (CDC), cases of type 1 diabetes in youth increased nationally from 187,000 in 2018 to 244,000 in 2019, representing an increase of 25 per 10,000 youths to 35 per 10,000 youths, respectively.
 - The peak age of diagnosis of type 1 diabetes is 13-14 years, but diagnosis can also occur much earlier or later in life.
- (c) Type 1 diabetes affects insulin production.
 - As a normal function, the body turns the carbohydrates in food into glucose (blood sugar), the basic fuel for the body's cells.
 - The pancreas makes insulin, a hormone that moves glucose from the blood into the cells.
 - In type 1 diabetes, the body's pancreas stops making insulin, and blood glucose levels rise.
 - Over time, glucose can reach dangerously high levels in the blood, which is called hyperglycemia.
 - Untreated hyperglycemia can result in diabetic ketoacidosis (DKA), which is a life-threatening complication of diabetes.

2. Risk Factors Associated with Type 1 Diabetes

- (a) It is recommended that students displaying warning signs associated with type 1 diabetes, which are described below, should be screened (tested) for the disease by their health care provider.
- (b) Researchers do not completely understand why some people develop type 1 diabetes and others do not; however, having a family history of type 1 diabetes can increase the likelihood of developing type 1 diabetes.
- (c) Other factors may play a role in developing type 1 diabetes, including environmental triggers such as viruses.

- (d) Type 1 diabetes is not caused by diet or lifestyle choices.
- 3. Warning Signs and Symptoms Associated with Type 1 Diabetes
 - (a) Warning signs and symptoms of type 1 diabetes in children develop quickly, in a few weeks or months, and can be severe. If your child displays the warning signs below, contact your child's primary health care provider or pediatrician for a consultation to determine if screening your child for type 1 diabetes is appropriate:
 - Increased thirst.
 - Increased urination, including bed-wetting after toilet training.
 - Increased hunger, even after eating.
 - Unexplained weight loss.
 - Feeling very tired.
 - Blurred vision.
 - Very dry skin.
 - Slow healing of sores or cuts.
 - Moodiness, restlessness, irritability, or behavior changes.
 - (b) DKA is a complication of untreated type 1 diabetes. DKA is a medical emergency. Symptoms include:
 - Fruity breath.
 - Dry/flushed skin.
 - Nausea.
 - Vomiting.
 - Stomach pains.
 - Trouble breathing.
 - Confusion.
- 4. Types of Diabetes Screening Tests that are Available
 - (a) Glycated hemoglobin (A1C) test:

- A blood test measures the average blood sugar over two to three months.
- An A1C level of 6.5 percent or higher on two separate tests indicates diabetes.
- (b) Random (non-fasting) blood sugar test:
 - A blood sample is taken any time without fasting.
 - A random blood sugar level of 200 milligrams per deciliter (mg/dl) or higher suggests diabetes.
- (c) Fasting blood sugar test:
 - A blood sample is taken after an overnight fast.
 - A level of 126 mg/dl or higher on two separate tests indicates diabetes.
- (d) Oral glucose tolerance test:
 - A test measuring the fasting blood sugar level after an overnight fast with periodic testing for the next several hours after drinking a sugary liquid.
 - A reading of more than 200 mg/dl after two hours indicates diabetes.
- 5. Type 1 Diabetes Treatments
 - (a) There are no known ways to prevent type 1 diabetes. Once type 1 diabetes develops, medication is the only treatment.
 - (b) If your child is diagnosed with type 1 diabetes, their health care provider will be able to help develop a treatment plan.
 - (c) Your child's health care provider may refer your child to an endocrinologist, a doctor specializing in the endocrine system and its disorders, such as diabetes.

Please contact your student's school nurse, school administrator, or health care provider if you have any questions.