

Glossary

Adapted from Helping the Student with Diabetes Succeed – A Guide for School Personnel.

A

Americans with Disabilities Act. A federal law enacted in 1990 to protect people with disabilities from discrimination. Under this law, diabetes can be considered a disability.

Autoimmune disease. A disorder in which the immune system mistakenly attacks and destroys body tissue that it believes to be foreign. In type 1 diabetes, an autoimmune disease, the immune system attacks and destroys the insulin-producing beta cells.

B

Blood glucose level. The amount of glucose in the blood. The recommended blood glucose levels for most people with diabetes are from about 80 to 120 before a meal, 180 or less after a meal, and between 100 and 140 at bedtime.

Blood glucose meter. A device that measures how much glucose is in the blood. A specially coated test strip containing a fresh sample of blood (obtained by pricking the skin, usually the finger, with a lancet) is inserted in the meter, which then measures the amount of glucose in the blood.

Blood glucose monitoring. The act of checking the amount of glucose in the blood. Also called self-monitoring of blood glucose.

C

Carbohydrates. One of the three main classes of foods and a source of energy for the body. Carbohydrates are mainly sugars and starches that the body breaks down into glucose. Foods high in carbohydrates raise blood glucose levels. Carbohydrate foods include: breads, crackers, and cereals; pasta, rice, and grains; vegetables; milk and yogurt; fruit, juice, and sweetened sodas; and table sugar, honey, syrup, and molasses.

CDE. Certified Diabetes (Nurse) Educator. A nurse educator or diabetes nurse practitioner is a registered nurse (RN) with special training and background in caring for and teaching people with diabetes. Many are certified in the field of diabetes. Some may have a master's degree.

CWD. Children With Diabetes. An organization to promote understanding of the care and treatment of diabetes, especially in children; to increase awareness of the need for unrestricted diabetes care for children at school and daycare; to support families living with diabetes; and to promote understanding of research into a cure.

Complications of diabetes. Harmful effects that may happen when a person has diabetes. Short-term complications resulting from poorly controlled or uncontrolled diabetes include hypoglycemia (low blood glucose) and hyperglycemia (high blood glucose). Long-term complications, which may develop when a person has had diabetes for a long

time, include blindness, amputation of feet or legs, kidney disease, heart disease, stroke, and nerve damage.

D

Diabetes Resource Nurse (DRN). Describes an RN who has received specific training on diabetes, the “Guiding Principles”, forms, as part of the training framework developed by the *Collaborative*. The DRN consults with school nurses, administrators, & other staff about diabetes related issues to insure optimal care for students with diabetes. The DRN may also assist with development of health care & 504 plans, provide resources & in-service education to district staff, help to trouble shooting individual problems (but not providing care to individual students) and provide standardization of health services for children with diabetes, with a goal toward healthier students who will be more capable of achieving optimally in their education programs. The DRN may be either a Regional Diabetes Resource Nurse or a District Diabetes Resource Nurse.

Diabetic Coma. A severe emergency in which a person is not conscious because his or her blood glucose is too low or too high. See also hyperglycemia; hypoglycemia; and diabetic ketoacidosis

Diabetic ketoacidosis (DKA). A condition that occurs due to insufficient insulin in the body. This can be due to illness, incorrect doses of insulin, or omitting insulin injections. The acidic state that follows causes fruity smelling breath, deep and rapid breathing, stomach pain, nausea, vomiting, and sleepiness. DKA can lead to coma and death if not treated promptly.

F

Fast-acting glucose. Foods containing simple sugar that are used to raise blood glucose levels quickly during a hypoglycemic episode.

G

Glucagon. A hormone that raises the level of glucose in the blood. Glucagon, given by injection, is used to treat severe hypoglycemia.

Glucose. A simple sugar found in the blood. It is the body’s main source of energy.

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.

H

Healthcare Provider Orders. Describes the medical orders or diabetes regimen developed by the student’s health care provider and family.

Hormone. A chemical produced by an organ that travels in the blood to affect other organs.

Hyperglycemia. A high level of glucose in the blood. High blood glucose can be due to a mismatch in insulin, food, and exercise. Symptoms include thirst, frequent urination, blurred vision, and fatigue.

Hypoglycemia. A low level of glucose in the blood. Low blood glucose is most likely to occur during or after exercise, if too much insulin is present, or not enough food is consumed. Symptoms include feeling shaky, having a headache, or being sweaty, pale, hungry, or tired.

I

Individualized Education Program (IEP). A program designed for students covered by the Individuals with Disabilities Education Act (IDEA).

Individualized Health Plan (IHP).

Individuals with Disabilities Education Act (IDEA). A federal law that provides funds to states to support special education and related services for children with disabilities, administered by the Office of Special Education Programs in the U.S. Department of Education. To be eligible for services under IDEA, a student's diabetes must impair his or her educational performance so that he or she requires special education and related services.

Insulin. A hormone produced by the pancreas that helps the body use glucose for growth and energy. There are several types of insulin that are used in combination to treat people with diabetes. These different types of insulin have been manufactured either to have immediate (rapid-acting or short-acting insulin), intermediate, or long (basal insulin) onset of action and duration of action in the body. A coordinated combination of insulin's is used to allow for adequate treatment of diabetes at meals, snacks, during periods of physical activity, and through the night.

Insulin injections. The process of putting insulin into the body with a needle and syringe or an insulin pen.

Insulin pen. A pen-like device used to put insulin into the body.

Insulin pump. A device that delivers a continuous supply of insulin. The insulin is delivered in a steady, measured dose through a system of plastic tubing (infusion set). Most infusion sets are started with a guide needle, then the plastic cannula (a tiny, flexible plastic tube) is left in place, taped with dressing, and the needle is removed.

Insulin resistance. A condition in which the body does not respond normally to the action of insulin. Many people with type 2 diabetes have insulin resistance.

K

Ketoacidosis. See Diabetic ketoacidosis.

Ketones (ketone bodies). Chemicals that the body makes when there is not enough insulin in the blood and the body must break down fat for its energy. Ketones can poison and even kill body cells. When the body does not have the help of insulin, ketones build up in the blood and “spill” over into the urine so that the body can get rid of them. Ketones that build up in the body for a long time lead to serious illness and coma. See also: Diabetic ketoacidosis.

L

Lancet. A fine, sharp-pointed needle used by people with diabetes for pricking their skin to obtain a sample of blood for blood glucose monitoring.

M

Metabolism. The term for the way cells chemically change food so that it can be used to keep the body alive.

Medical alert identification. An identification card and necklace or bracelet indicating the student has diabetes and giving an emergency number to call.

Mg/dL. Milligrams per deciliter. This term is used in blood glucose monitoring to describe how much glucose is in a specific amount of blood.

N

NDEP. National Diabetes Education Program. A federally sponsored partnership of the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and other organizations.

Nursing Care Plan. A plan developed by the school nurse used to implement the student’s diabetes medical management plan. The plan describes functional problem areas, sets goals for overcoming problems, and lists tasks/interventions to meet the goals.

P

Pallor: Abnormal paleness of the skin.

Palpitations. Abnormally rapid or violent beating of the heart.

Pancreas. The organ behind the lower part of the stomach that makes insulin.

Peak effect time. Time when insulin has its major impact on reducing blood glucose levels. See also Insulin.

Q

Quick Reference Emergency Plan. This plan provides school personnel with essential information on how to recognize and treat hypoglycemia or hyperglycemia.

S

School Nurse Consultant. An RN who contracts with specific school districts in rural communities, to coordinate and supervise the care and policy for children with diabetes.

Section 504 of the Rehabilitation Act. A federal law that prohibits recipients of federal funds from discriminating against people on the basis of disability.

Students with Diabetes in Colorado Schools Collaborative. A workgroup consisting of partners equally concerned about the safety and care of children within Colorado schools. The workgroup began in August 2005 and meets regularly to review and assess the training, materials/toolkits, forms, and DRN program currently underway in Colorado schools.

Syringe. A device used to inject medications such as insulin into body tissue.

T

Target range. A selected level for blood glucose values that the person with diabetes tries to maintain. The target range is usually determined by the physician in consultation with the patient (or parents, if the patient is a child). See also blood glucose levels.

Test strips. Specially designed strips used in blood glucose meters or in urine testing.

Trained Diabetes Personnel. Nonmedical personnel who have basic diabetes knowledge and have received training in diabetes care, including the performance of blood glucose monitoring, insulin and Glucagon administration, recognition and treatment of hypoglycemia and hyperglycemia, and performance of urine ketone testing.

U

Urine ketone testing. A procedure for measuring the level of ketones in the urine.