When diagnosed with diabetes, often the doctor uses terms unfamiliar terms:

**A1C**
A test that measures a person's average blood glucose (blood sugar) level over the past two to three months. Hemoglobin (HEE-mo-glo-bin) is the part of a red blood cell that carries oxygen to the cells and sometimes joins with the glucose in the bloodstream. Also called hemoglobin A1C or glycosylated (gly-KOH-sih-lay-ted) hemoglobin, the test shows the amount of glucose that sticks to the red blood cell, which is proportional to the amount of glucose in the blood.

**Acute**
Describes something that happens suddenly and for a short time. Opposite of chronic.

**Adult-onset diabetes**
Former term for type 2 diabetes.

**AGEs** (A-G-EEZ)
Stands for advanced glycosylation (gly-KOH-sih-LAY-shun) end products. AGEs are produced in the body when glucose links with protein. They play a role in damaging blood vessels, which can lead to diabetes complications.

**Albuminuria** (al-BYOO-mih-NOO-ree-uh)
A condition in which the urine has more than normal amounts of a protein called albumin. Albuminuria may be a sign of nephropathy (kidney disease).

**Alpha cell** (AL-fa)

A type of cell in the pancreas. Alpha cells make and release a hormone called glucagon. The body sends a signal to the alpha cells to make glucagon when blood glucose (blood sugar) falls too low. Then glucagon reaches the liver where it tells it to release glucose into the blood for energy.

**Amylin** (AM-ih-lin)
A hormone formed by beta cells in the pancreas. Amylin regulates the timing of glucose release into the bloodstream after eating by slowing the emptying of the stomach.

**Autoimmune disease** (AW-toh-ih-MYOON)
Disorder of the body's immune system in which the immune system mistakenly attacks and destroys body tissue that it believes to be foreign.

**Basal rate**
A steady trickle of low levels of longer-acting insulin, such as that used in insulin pumps.

**Blood glucose** (also called blood sugar)
The main source of energy that food is turned into that’s found in the blood.

**Blood glucose**(blood sugar)**level**
The amount of blood glucose at a specific time. It is measured in milligrams per deciliter, or mg/dL.

**Blood glucose meter**
A small, portable machine used by people with diabetes to check their blood glucose levels. After pricking the skin with a lancet, one places a drop of blood on a test strip in the machine. The blood glucose meter (sometimes called a monitor) measures and displays the blood glucose level.

**Blood glucose monitoring**
Checking blood glucose level on a regular basis in order to manage diabetes. A blood glucose meter or continuous glucose monitor (CGM) is needed for blood glucose monitoring.

**Bolus** (BOH-lus)
An extra amount of insulin taken to cover an expected rise in blood glucose (blood sugar), often related to a meal or snack.

**Borderline diabetes**
Not a term recognized by the American Diabetes Association, borderline diabetes is sometimes used to describe prediabetes.

**Brittle diabetes**
A term not recognized by the American Diabetes Association, sometimes used to describe when a person's blood glucose (blood sugar) levels move in extremes from low to high and from high to low.

**C-peptide** (see-peptide)
"Connecting peptide", a substance the pancreas releases into the bloodstream in equal amounts to insulin. A test of C-peptide levels shows how much insulin the body is making.

**Certified diabetes care and education specialist**(CDCES)
A health care professional with expertise in diabetes education who has met eligibility requirements and successfully completed a certification exam.

**Chronic**
Describes something that is long-lasting. Opposite of acute.

**Dawn phenomenon** (feh-NAH-meh-nun)
The early-morning (4 a.m. to 8 a.m.) rise in blood glucose level that may stay higher later into the morning.

**Diabetes Control and Complications Trial**(DCCT)
A study by the National Institute of Diabetes and Digestive and Kidney Diseases, conducted from 1983 to 1993 in people with type 1 diabetes. The study showed that intensive therapy compared to conventional therapy significantly helped prevent or delay diabetes complications. Intensive therapy included multiple daily insulin injections or the use of an insulin pump with multiple blood glucose (blood sugar) readings each day. Complications followed in the study included diabetic retinopathy, neuropathy, and nephropathy.

**Diabetes educator**
A health care professional who teaches people who have diabetes how to manage their diabetes. Some diabetes educators are certified diabetes care and education specialists (CDCES)s.

**Diabetes insipidus** (in-SIP-ih-dus)
A condition unrelated to type 1, type 2, or gestational diabetes that is also characterized by frequent and heavy urination, excessive thirst, and an overall feeling of weakness.

**Diabetes** (diabetes mellitus (MELL-ih-tus))
A condition where the body’s blood glucose (blood sugar) levels are higher than normal (hyperglycemia) resulting from the body's inability to use or store blood glucose for energy. In type 1 diabetes, the pancreas no longer makes insulin and blood glucose can’t enter the cells to be used for energy. In type 2 diabetes, either the pancreas does not make enough insulin or can’t use the insulin it does produce effectively.

**Diabetes Prevention Program**(DPP)
A study by the National Institute of Diabetes and Digestive and Kidney Diseases conducted from 1998 to 2001 in people at high risk for type 2 diabetes. All study participants had impaired glucose tolerance, also called prediabetes, and were overweight. The study showed that people who lost 5 to 7 percent of their body weight through a low-fat, low-calorie diet, and moderate exercise (usually walking for 30 minutes, five days a week) reduced their risk of getting type 2 diabetes by 58 percent. Participants who received treatment with the oral diabetes drug metformin reduced their risk of getting type 2 diabetes by 31 percent.

**Diabetic ketoacidosis** (DKA) (KEY-toe-ass-ih-DOH-sis)
An emergency condition in which high blood glucose (blood sugar) levels, along with a lack of insulin, result in the breakdown of body fat for energy and an accumulation of ketones in the blood and urine. Signs of DKA are nausea and vomiting, stomach pain, fruity breath odor, and rapid breathing. Untreated DKA can lead to coma and death.

**Diabetic mastopathy**
A rare fibrous breast condition occurring in women, and sometimes men, with long-standing diabetes. The lumps are not malignant and can be surgically removed, although they often recur.

**Diabetic myelopathy**(my-eh-LAH-puh-thee)
Damage to the spinal cord found in some people with diabetes.

**Diabetic retinopathy** (REH-tih-NOP-uh-thee)
A type of diabetic eye disease; damage to the small blood vessels in the retina. Loss of vision may result.

**Diabetogenic** (DY-uh-beh-toh-JEN-ic)
Causing diabetes. For example, some drugs cause blood glucose (blood sugar) levels to rise, resulting in diabetes.

**Diabetologist** (DY-uh-beh-TAH-luh-jist)
A doctor who specializes in treating people with diabetes.

**Endocrinologist** (EN-doh-krih-NAH-luh-jist)
A doctor who specializes in treating people who have endocrine gland problems, such as diabetes.

**Exchange lists**
One of several approaches for diabetes meal planning. Foods are categorized into three groups based on their nutritional content. Lists provide the serving sizes for carbohydrates, meat and meat alternatives, and fats. These lists allow for substitution for different groups to keep the nutritional content fixed.

**Fasting blood glucose test**
A check of a person's blood glucose (blood sugar) level after the person has not eaten for 8 to 12 hours (usually overnight). A fasting blood glucose test in a lab is one of the tests used to diagnose prediabetes and diabetes. It is also used to evaluate how the treatment of a person with diabetes is working using results from a blood glucose meter.

**Gestational diabetes** (GDM) (jes-TAY-shun-ul MELL-ih-tus)
A type of diabetes that develops only during pregnancy and usually disappears upon delivery, but increases the risk that the mother will develop diabetes later. GDM is managed with meal planning, activity, and, in some cases, insulin.

**Glucagon** (GLOO-kah-gahn)
A hormone produced by the alpha cells in the pancreas. It raises blood glucose (blood sugar). An injectable and nasal forms of glucagon, available by prescription, is used to treat severe hypoglycemia.

**Glucose tablets**
Chewable tablets made of pure glucose used for treating hypoglycemia.

**Glycemic index** (gly-SEE-mik)
A ranking of carbohydrate-containing foods, based on the food's effect on blood glucose (blood sugar) compared with a standard reference food. This value is not easily accessible for meal planning.

**Glycosuria** (gly-koh-SOOR-ee-ah)
The presence of glucose in the urine.

**Honeymoon phase**
Some people with type 1 diabetes experience a brief remission called the "honeymoon period." During this time their pancreas may still secrete some insulin. Over time, this secretion stops and as this happens, the person will require more insulin from injections. The honeymoon period can last weeks, months, or longer.

**Hyperglycemia** (HY-per-gly-SEE-mee-uh)
High blood glucose (blood sugar).

**Hyperinsulinemia** (HY-per-IN-suh-lih-NEE-mee-uh)
A condition in which the level of insulin in the blood is higher than normal. Caused by overproduction of insulin by the body and is commonly found in people with insulin resistance.

**Hypoglycemia** (hy-po-gly-SEE-mee-uh)
Low blood glucose (blood sugar) is a condition that occurs when one's blood glucose is lower than their target, usually less than 70 mg/dL. Signs include hunger, nervousness, shakiness, perspiration, dizziness or light-headedness, sleepiness, and confusion. If left untreated, hypoglycemia may lead to unconsciousness. Hypoglycemia is treated by consuming a carbohydrate-rich food such as a glucose tablet or juice. Severe low blood glucose may also be treated with an injection of glucagon if the person is unconscious or unable to swallow. Sometimes called an insulin reaction.

**Hypoglycemia unawareness** (un-uh-WARE-ness)
A state in which a person does not feel or recognize the symptoms of hypoglycemia. People who have frequent episodes of hypoglycemia may no longer experience the warning signs of it.

**Immune system** (ih-MYOON)
The body's system for protecting itself from viruses and bacteria or any "foreign" substances.

**Immunosuppressant** (ih-MYOON-oh-suh-PRESS-unt)
A drug that suppresses the natural immune responses. Immunosuppressants are given to transplant patients to prevent organ rejection or to patients with autoimmune diseases.

**Impaired fasting glucose** (IFG)
A previous term for prediabetes found when using a fasting plasma glucose test.

**Impaired glucose tolerance** (IGT)
A previous term for prediabetes found when using an oral glucose tolerance test (OGTT).

**Implantable insulin pump** (im-PLAN-tuh-bull)
A small pump placed inside the body to deliver insulin in response to remote-control commands from the user.

**Inhaled insulin**
An insulin in powder form that can be inhaled to manage blood glucose.

**Injection** (in-JEK-shun)
Inserting liquid medication or nutrients into the body with a syringe. A person with diabetes may use short needles or pinch the skin and inject at an angle to avoid an intramuscular injection of insulin.

**Injection site rotation**
Changing the places on the body where insulin is injected. Rotation prevents the formation of lipodystrophies.

**Injection sites**
Places on the body where insulin is usually injected.

**Insulin**
A hormone that helps the body use glucose for energy. When needed, it is taken to manage blood glucose (blood sugar).

**Insulin adjustment**
A change in the amount of insulin a person with diabetes takes based on factors such as meal planning, activity, and blood glucose (blood sugar) levels.

**Insulin analogues**
An insulin analogue is a tailored form of insulin in which certain amino acids in the insulin molecule have been modified. The analogue acts in the same way as the original insulin, but with some beneficial differences for people with diabetes. Analogues are sometimes referred to as "designer" insulins.

**Insulin pen**
A device for injecting insulin that holds replaceable cartridges of insulin. Also available in disposable form.

**Insulin pump**
An insulin-delivering device about the size of a deck of cards that can be worn on a belt or kept in a pocket. An insulin pump connects to narrow, flexible plastic tubing that ends with a needle inserted just under the skin. Users set the pump to give a steady trickle or basal amount of insulin continuously throughout the day. Pumps can also release bolus doses of insulin (several units at a time) at meals and at times when blood glucose (blood sugar) is too high.

**Insulin reaction**
When the level of glucose in the blood is too low (at or below 70 mg/dL). Also known as hypoglycemia.

**Insulin receptors**
Areas on the outer part of a cell that allow the cell to bind with insulin in the blood. When the cell and insulin bind, the cell can take glucose from the blood and use it for energy.

**Insulin resistance**
The body's inability to respond to and use the insulin it produces. Insulin resistance may be linked to obesity, hypertension, and high levels of fat in the blood.

**Insulin-dependent diabetes mellitus** (IDDM)
Former term for type 1 diabetes.

**Insulinoma** (IN-suh-lih-NOH-mah)
A tumor of the beta cells in the pancreas. An insulinoma may cause the body to make extra insulin, leading to hypoglycemia.

**Intensive therapy**
A treatment for diabetes in which blood glucose (blood sugar) is kept as close to normal as possible. Intramuscular injection (in-trah-MUS-kyoo-lar) inserting liquid medication into a muscle with a syringe. Glucagon may be given as an intramuscular injection for hypoglycemia.

**Juvenile diabetes**
Former term for type 1 diabetes.

**Ketone**
A chemical produced when there is a shortage of insulin in the blood and the body breaks down body fat for energy. High levels of ketones can lead to diabetic ketoacidosis (DKA). Sometimes referred to as ketone bodies.

**Ketonuria** (key-toe-NUH-ree-ah)
A condition occurring when ketones are present in the urine, a warning sign of diabetic ketoacidosis (DKA).

**Ketosis** (ke-TOE-sis)
A ketone buildup in the body that may lead to diabetic ketoacidosis (DKA). Signs of ketosis are nausea, vomiting, and stomach pain.

**Maturity-onset diabetes of the young** (MODY)
A kind of type 2 diabetes that occurs in younger people.

**Metabolic syndrome**
Is used to describe the tendency of several conditions to occur together, including obesity, insulin resistance, diabetes or prediabetes, hypertension, and high lipids.

**Noninsulin-dependent diabetes mellitus** (NIDDM)
Former term for type 2 diabetes.

**Noninvasive blood glucose monitoring** (NON-in-VAY-siv)
Measuring blood glucose (blood sugar) without pricking the finger to obtain a blood sample.

**NPH insulin**
An intermediate-acting insulin. NPH stands for neutral protamine Hagedorn. On average, NPH insulin starts to lower blood glucose within one to two hours after injection. It has its strongest effect 6 to 10 hours after injection but keeps working about 10 hours after injection. Also called N insulin.

**Oral glucose tolerance test**(OGTT)
A test to diagnose prediabetes and diabetes. The oral glucose tolerance test is given by a health care professional after an overnight fast. A blood sample is taken, then the patient drinks a high-glucose beverage. Blood samples are taken at intervals for two to three hours. Test results are compared with a standard and show how the body uses glucose over time.

**Oral hypoglycemic agents** (hy-po-gly-SEE-mik)
Medicines taken by mouth by people with type 2 diabetes to manage blood glucose (blood sugar) levels.

**Prediabetes**
A condition in which blood glucose (blood sugar) levels are higher than normal but are not high enough for a diagnosis of diabetes. People with prediabetes are at increased risk for developing type 2 diabetes and for heart disease and having a stroke. Previous names for prediabetes are impaired glucose tolerance and impaired fasting glucose.

**Premixed insulin**
A commercially produced combination of two different types of insulin. See 50/50 insulin and 70/30 insulin.

**Preprandial blood glucose** (pree-PRAN-dee-ul)
Blood glucose (blood sugar) level before eating.

**Prevalence**
The number of people in a given group or population who are reported to have a disease.

**Proinsulin** (proh-IN-suh-lin)
The substance made first in the pancreas and then broken into several pieces to become insulin.

**Secondary diabetes**
A type of diabetes caused by another disease or certain drugs or chemicals. **Secondary diabetes**
A type of diabetes caused by another disease or certain drugs or chemicals.

**Self-management**
In diabetes, the ongoing process of a person managing diabetes. This includes meal planning, physical activity, and blood glucose (blood sugar) monitoring, and may also include taking diabetes medications, handling episodes of low and high blood suhar, managing diabetes when traveling, and more. The person with diabetes designs his or her own self-management treatment plan with their diabetes care team, which may include doctors, nurses, diabetes educators, dietitians, pharmacists, and others.

**Sucrose**
A two-part sugar made of glucose and fructose. Known as table sugar or white sugar, it is found naturally in sugar cane and in beets.

**Sugar**
A class of carbohydrates with a sweet taste, including glucose, fructose, and sucrose.

**Sugar alcohols**
Sweeteners that produce a smaller rise in blood glucose (blood sugar) than other carbohydrates. Their calorie content is about two calories per gram. Includes erythritol, hydrogenated starch hydrolysates, isomalt, lactitol, maltitol, mannitol, sorbitol, and xylitol. Also known as polyols (PAH-lee-alls.)

**Type 1 diabetes**
A condition characterized by high blood glucose (blood sugar) levels caused by a lack of insulin. Occurs when the body's immune system attacks the insulin-producing beta cells in the pancreas and destroys them. The pancreas then produces little or no insulin. Type 1 diabetes develops most often in young people but can appear in adults.

**Type 2 diabetes**
A condition characterized by high blood glucose (blood sugar) levels caused by either a lack of insulin or the body's inability to use insulin efficiently. Type 2 diabetes develops most often in middle-aged and older adults but can appear in young people.

**Unit of insulin**
The basic measure of insulin. U-100 insulin means 100 units of insulin per milliliter (mL) or cubic centimeter (cc) of solution. Most insulin made today in the United States is U-100.

**United Kingdom Prospective Diabetes Study** (UKPDS)
A study in England, conducted from 1977 to 1997 in people with type 2 diabetes. The study showed that if people lowered their blood glucose (blood sugar), they lowered their risk of eye disease and kidney damage. In addition, those with type 2 diabetes and hypertension who lowered their blood pressure also reduced their risk of stroke, eye damage, and death from long-term complications.