



## T1Dictionary

*Terms to Know When Navigating Type 1 Diabetes*

If you've received a type 1 diabetes (T1D) diagnosis within your family, or if you're learning about the disease, there are several terms commonly used when discussing the treatment and management of T1D. Below is an alphabetical list, grouped by topic, with definitions of the words we think will be the most helpful to know.

### Scientific Terminology

**Autoantibodies:** These are immune markers, called antibodies, which are directed at one's own body. If you have two or more autoantibodies, your chances of developing T1D are nearly 100%.

**Autoimmunity:** Immune responses against a person's own healthy cells and tissues. In T1D, the autoimmune response targets the insulin-producing beta cells of the pancreas.

**Beta Cells:** These cells are located in the pancreas, and their primary function is to synthesize, store and release insulin. In T1D, beta cells are destroyed and with them the body's ability to produce insulin.

**Glucagon:** A hormone produced by the alpha cells in the pancreas that raises blood-sugar levels. It's available by prescription, and may be used to treat severe low blood sugar (hypoglycemia).

**HbA1c:** Measuring HbA1c in the blood is used to reflect average blood-sugar levels over a period of three months in people with T1D.

**Insulin:** A hormone produced in the pancreas, which regulates the amount of glucose in the blood.



T1D can be overwhelming at times, but you're never alone. The JDRF community has your back. Learn more at [jdrf.org/T1D-resources](https://jdrf.org/T1D-resources).

## Living with T1D

**Artificial Pancreas (AP) or Automated Insulin Delivery (AID):** These systems monitor your blood-sugar levels and automatically provide insulin — much like a normal pancreas would do naturally — with the help of a sophisticated computer algorithm.

**Basal:** Basal insulin (also known as background insulin) keeps blood-sugar levels stable during periods of fasting, such as between meals or during sleep. It plays a vital role in managing T1D.

**Blood Sugar Monitoring:** Monitoring lets a person know when insulin may be needed to correct high blood sugar or when carbohydrates may be needed to correct low blood sugar. Knowing your blood-sugar levels and acting accordingly are among the most important ways to manage T1D.

**Bolus:** Sometimes people with T1D take an extra amount of insulin, often with a meal or snack, to cover an expected rise in blood sugar — this is called a bolus.

**Carbohydrate Counting:** People with T1D must count each carbohydrate gram they eat or drink. Based on that count, they dose insulin using an “insulin-to-carb” ratio, which helps them maintain stable blood-sugar levels after eating. The insulin-to-carb ratio is determined by the person’s doctor, called an endocrinologist.

**Continuous Glucose Monitor (CGM):** This device will automatically track your blood-sugar levels every few minutes, day and night, allowing users to see whether their levels are trending high or low before they become dangerous. CGM use has significantly improved diabetes management, helping people avoid blood-sugar highs and lows and the complications that these bring.

**Honeymoon Phase:** For some people, there is a period of time shortly following T1D diagnosis when the pancreas is still able to produce enough insulin. It typically lasts a few months to a year post-diagnosis, after which the person with T1D is dependent on external insulin to survive.

**Insulin Management Devices:** An insulin-delivering pump or pod. Users set the device to give a steady trickle of insulin continuously throughout the day and extra (bolus) doses of insulin at meals and at times when blood sugar is too high.

---

## T1D-Related Conditions

**Brittle Diabetes:** Diabetes that is hard to control. It is characterized by wide variations or “swings” in blood-sugar levels, going from too high (hyperglycemia) to too low (hypoglycemia) very quickly.

**Diabetic Ketoacidosis (DKA):** A life-threatening condition due to a shortage of insulin, causing symptoms like dehydration, nausea and vomiting, confusion and difficulty breathing. Approximately one-third of people in the U.S. present with DKA at the time of T1D diagnosis.

**Hyperglycemia:** This is the term for high blood sugar. It is important for people with T1D to be aware of their blood-sugar levels, and keep them within a normal range, to avoid the complications that can ensue.

**Hypoglycemia:** This is the term for low blood sugar and can arise if one takes too much insulin. Most of the time, low blood sugar is caught early on, with symptoms such as sweating, fatigue, hunger and/or irritability. Action is then taken to bring the blood sugar back to normal range. Approximately 40% of insulin-treated people experience episodes of severe hypoglycemia.

**Hypoglycemia Unawareness:** Some people cannot tell when their blood sugar is too low. This is called “hypoglycemia unawareness.” It can cause people with T1D to have difficulty speaking, have seizures, become unconscious or, in extreme cases, die.

2019

---

Every gift takes us one step closer to a cure for T1D. Find out how you can support JDRF and make a difference in the lives of people with T1D by visiting [jdrf.org/donate](https://jdrf.org/donate).

You can also follow us on:

 [facebook.com/myjdrf](https://facebook.com/myjdrf)

 [@JDRF](https://twitter.com/JDRF)

 [@JDRFHQ](https://www.instagram.com/JDRFHQ)

 [youtube.com/user/jdrfonline](https://youtube.com/user/jdrfonline)