

## Diabetes Type 1 Overview

- Diabetes is a set of related diseases in which the body cannot regulate the amount of sugar (glucose) in the blood.
- Glucose in the blood gives you energy—the kind you need when you walk briskly, run for a bus, ride your bike, take an aerobics class, and perform your day-to-day chores.
- Glucose in the blood is produced by the liver from the foods you eat.
- In a healthy person, the blood glucose level is regulated by several hormones, one of which is insulin. Insulin is produced by the pancreas, a small organ near the stomach that also secretes important enzymes that help in the digestion of food.
- Insulin allows glucose to move from the blood into liver, muscle, and fat cells, where it is used for fuel.
- In diabetes, glucose in the blood cannot move into cells, and it stays in the blood. This not only harms the cells that need the glucose for fuel, but also harms certain organs and tissues exposed to the high glucose levels.
- People with Type 1 diabetes do not produce enough insulin.
- The body stops producing insulin or produces too little insulin to regulate blood glucose level.
- People with Type 1 diabetes generally require daily insulin treatment to sustain life.
- **Hypoglycemia**, or **Low Blood Sugar**, or **Insulin Reaction**: occurs from time to time in most people with diabetes. It results from taking too insulin, missing a meal, doing more exercise than usual. It is very important to recognize hypoglycemia and be prepared to treat it at all times. Headache, feeling dizzy, poor concentration, tremors of hands, and sweating are common symptoms of hypoglycemia. You can faint or have a seizure if blood sugar level gets too low.
- **Hyperglycemia**, or **Diabetic Ketoacidosis** is a serious condition in which uncontrolled (usually due to complete lack of insulin or a relative deficiency of insulin) over time creates a buildup in the blood of acidic waste products called ketones. High levels of ketones can be very harmful. This typically happens to people with Type 1 diabetes who do not have good blood glucose control. **Diabetic Ketoacidosis** can be precipitated by infection, stress, missing medications like insulin, or medical emergencies like stroke and heart attack.

