

# COMPREHENSIVE GUIDE TO DIABETES

## Description

Diabetes is a chronic metabolic condition that occurs when the body either cannot produce enough insulin or cannot effectively use the insulin it makes. This leads to elevated levels of glucose (sugar) in the blood.

## History

The recognition of diabetes dates back thousands of years:

Ancient Egypt (c. 1550 BC): The Ebers Papyrus contains what is believed to be the first medical reference to a condition involving "excessive urination."

Ancient India (5th/6th century BC): Physicians Sushruta and Charaka described Madhumeha ("honey urine"), noting that ants were attracted to the sweet urine of certain patients.

The Coining of Names: The term "diabetes" (meaning "to pass through") was coined by Apollonius of Memphis, while "mellitus" (meaning "honey-sweet") was added centuries later by Thomas Willis in 1675.

The Insulin Breakthrough: In 1921, Frederick Banting and Charles Best successfully isolated insulin, transforming a once-fatal diagnosis into a manageable condition.

## How the Disease Spreads

It is a common misconception that diabetes is contagious. **Diabetes is a non-communicable disease (NCD)**; it cannot be spread through:

- Physical contact (shaking hands, kissing).
- Airborne droplets (coughing or sneezing).
- Shared food or utensils.
- Blood transfusions.
- Instead of "spreading" from person to person, diabetes develops based on:
- **Genetics:** A family history of the disease.
- **Autoimmunity:** In Type 1 diabetes, the immune system mistakenly attacks insulin-producing cells.

- **Lifestyle:** Factors like obesity, physical inactivity, and poor diet contribute primarily to Type 2 diabetes.

## Common Symptoms

Symptoms can range from subtle to severe. While Type 1 symptoms often appear suddenly, Type 2 symptoms may develop over many years.

Polyuria: Frequent urination, especially at night.

Polydipsia: Extreme or unquenchable thirst.

Polyphagia: Intense hunger, even after eating.

Unexplained Weight Loss: Losing weight without trying (common in Type 1).

Fatigue: Feeling very tired or weak.

Blurred Vision: High blood sugar pulls fluid from the eye lenses, affecting focus.

Slow Healing: Cuts, sores, or bruises that take a long time to heal.

Neuropathy: Tingling, pain, or numbness in the hands and feet.

## When to Visit a Doctor

Early diagnosis is key to preventing long-term complications like heart disease or kidney failure. You should consult a healthcare professional if:

- You experience any of the common symptoms.
- You have a family history of diabetes and are over age 35.
- You have high blood pressure or are overweight.
- Emergency Signs: Seek immediate care if you experience fruity-smelling breath, extreme abdominal pain, or confusion, as these can be signs of Diabetic Ketoacidosis (DKA).

## Preventative Measures

While Type 1 diabetes currently cannot be prevented, the risk of developing Type 2 diabetes can be significantly reduced with these steps:

- Weight Management: Losing even 5–7% of your body weight can lower your risk by nearly 60%.
- Physical Activity: Aim for at least 150 minutes of moderate aerobic activity (like brisk walking) per week.
- Balanced Diet: Prioritize high-fiber plant foods (whole grains, legumes, vegetables) and limit processed sugars and refined carbohydrates.

- **Quit Smoking:** Smoking increases insulin resistance and the risk of heart complications.
- **Regular Screening:** If you are at high risk, regular blood glucose tests can help catch "prediabetes" before it progresses.