

# WHAT IS



# DIABETES MELLITUS

Most of the food you eat is broken down into sugar (also called glucose) and released into your bloodstream.

When your blood sugar goes up, it signals your pancreas to release insulin. Insulin acts like a key to let the blood sugar into your body's cells for use as energy.

If you have diabetes, your body either doesn't make enough insulin or can't use the insulin it makes as well as it should.

## TYPES OF DIABETES

There are three main types of diabetes: type 1, type 2, and gestational diabetes (diabetes while pregnant).



Type 1 diabetes is thought to be caused by an autoimmune reaction (the body attacks itself by mistake) that stops your body from making insulin.

Type 2 diabetes, your body doesn't use insulin well and can't keep blood sugar at normal levels.

Gestational diabetes develops in pregnant women who have never had diabetes. If you have gestational diabetes, your baby could be at higher risk for health problems.

Gestational diabetes usually goes away after your baby is born but increases your risk for type 2 diabetes later in life.



# SYMPTOMS OF DIABETES



Diabetes is predicted by a clear set of symptoms, but it still often goes undiagnosed.

The main 3 diabetes signs are:

➔ Increased thirst

➔ Increased need to urinate

➔ Increased hunger

Type 1 diabetes symptoms often appear suddenly and include:

- ➔ High levels of sugar in the blood and urine
- ➔ Increased thirst
- ➔ Increased urination (bed-wetting may occur in children who have already been toilet trained)
- ➔ Rapid and unexplained weight loss
- ➔ Extreme hunger
- ➔ Extreme weakness or fatigue
- ➔ Unusual irritability
- ➔ Blurred vision
- ➔ Nausea, vomiting and abdominal pain
- ➔ Unpleasant breath odour
- ➔ Itchy skin

Type 2 diabetes symptoms:

- ➔ Include thirst
- ➔ Tiredness
- ➔ Skin infections
- ➔ Tingling or dry skin are also relatively common symptoms.
- ➔ Regular need to urinate
- ➔ Irritability and nausea.
- ➔ Blurry vision



# CAUSES OF



# DIABETES

- The exact cause of diabetes is unknown. What is known is that your immune system attacks and destroys your insulin-producing cells in the pancreas. This leaves you with little or no insulin. Instead of being transported into your cells, sugar builds up in your bloodstream.
- Type 1 is thought to be caused by a combination of genetic susceptibility and environmental factors, though exactly what those factors are still unclear.
- Weight is not believed to be a factor in type 1 diabetes.
- During pregnancy, the placenta produces hormones to sustain your pregnancy.
- These hormones make your cells more resistant to insulin.
- Normally, your pancreas responds by producing enough extra insulin to overcome this resistance. But sometimes your pancreas can't keep up. When this happens, too little glucose gets into your cells and too much stays in your blood, resulting in gestational diabetes.

## NURSING DIAGNOSES OF DIABETES

### IMBALANCED NUTRITION:

WHILE A PATIENT MAY BE INGESTING SUFFICIENT CALORIES, WITHOUT A WAY TO BRING THOSE SUGARS INTO THE CELLS, THE BODY MAY NOT BE RECEIVING ENOUGH CALORIES.

### UNSTABLE BLOOD GLUCOSE:

HYPERGLYCEMIA, HYPOGLYCEMIA

### IMBALANCED FLUID VOLUME:

HYPOVOLEMIA

### IMPAIRED SKIN INTEGRITY:

DIABETIC NEUROPATHY, PERIPHERAL VASCULAR, INFECTIONS PARTICULARLY IN THE FEET, ULCER

### THERMAL INJURY:

PERIPHERAL NEUROPATHY ALSO AFFECTS A PATIENT'S ABILITY TO FEEL HIGH TEMPERATURES, AND THEY ARE MORE LIKELY TO SCALD OR BURN THEMSELVES WITHOUT REALIZING IT.

### INFECTION:

HYPERGLYCEMIA, ULCERS



# TREATMENT



## Treatment of Type 1 diabetes

- Treatment requires a strict regimen that typically includes a carefully calculated diet, planned physical activity, multiple daily insulin injections and home blood glucose testing a number of times per day.

## Treatment of Type 2 diabetes

- Type 2 diabetes may be managed with non-insulin medications, insulin, weight reduction, or dietary changes.
- Medications for type 2 diabetes can work in different ways to reduce blood glucose levels.

### They may:

- increase insulin sensitivity, increase glucose excretion, decrease absorption of carbohydrates from the digestive tract, or work through other mechanisms.
- A type 2 diabetes diet is based on eating foods low on the glycemic index, for example:

- Fruits
- Brown rice
- Lentils
- Vegetables
- Steel-cut oatmeal
- Whole wheat
- Beans

### Sources:

- <https://www.cdc.gov/diabetes/basics/diabetes.html>
- <https://www.diabetes.co.uk/what-is-diabetes.html>
- <https://www.diabetesresearch.org/what-is-diabetes>
- <https://www.mayoclinic.org/diseases-conditions/diabetes/symptoms-causes/syc-20371444>
- <https://thenerdynurse.com/nursing-diagnosis-for-diabetes/>
- <https://www.diabetes.co.uk/treatment.html>
- [https://www.medicinenet.com/diabetes\\_treatment/article.htm](https://www.medicinenet.com/diabetes_treatment/article.htm)
- <http://bilheal.bilkent.edu.tr/aykonu/ay2013/diabet/diabet.htm>

