

## Anti-Diabetic Medicines

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### DESCRIPTION

Diabetes mellitus is known as increase blood sugar in which the body does not produce enough or respond normally to insulin, causing blood sugar levels to be abnormal. Symptoms include frequent urination, thirst, and an increase in appetite. If it is not treated, it can cause many health complications. Acute complications like diabetic ketoacidosis, hyperosmolar hyperglycemic state, or death. Other complications like cardiovascular disease, stroke, chronic kidney disease, foot ulcers, nerve disorder, glaucoma and cognitive impairment.

There are three main types of diabetes mellitus they are: Type 1 diabetes, Type 2 diabetes, Gestational diabetics.

Type 1 diabetes, the body's immune system attacks the insulin-producing cells of the pancreas, and more than 90% of them are permanently destroyed. The pancreas, therefore, produces little or no insulin, therefore it is called as "Insulin-Dependent Diabetes Mellitus" or "juvenile diabetes".

Type 2 diabetes, the pancreas often continues to produce insulin, sometimes even at higher-than-normal levels, especially early in the disease. However, the body develops resistance to the effects of insulin, so there is not enough insulin to meet the body's needs; therefore it is called as "Non-insulin dependent diabetes mellitus".

Gestational diabetes: Pregnant women develop diabetes during pregnancy.

Gestational diabetes is more common among obese women, Women with a family history of diabetes.

### Risks of diabetes during pregnancy

Early in pregnancy, poor control of diabetes increases the risk of the following:

Having a baby with major birth defects, Having a miscarriage.

Late in pregnancy, poor control of diabetes increases the risk of the following:

Having a baby that weighs more than 9 pounds at birth, Developing preeclampsia, Having a baby whose shoulder gets caught in the birth canal, Needing a cesarean delivery, Having a stillborn baby.

### Complications of diabetes

Brain, causing stroke

Eyes (diabetic retinopathy), causing blindness

Heart, causing heart attack

Kidneys (diabetic nephropathy), causing chronic kidney disease

Nerves (diabetic neuropathy), causing decreased sensation in feet

### Diagnosis of diabetes mellitus

Blood glucose measurement: Blood glucose levels are often checked during a routine physical examination. Checking the levels of glucose in the blood regularly is particularly important in older people because diabetes is so common in later life.

### Treatment of diabetes mellitus

In type 1 diabetes insulin injections in type 2 diabetes often drugs by mouth and sometimes insulin or other drugs by injection. Treatment of high blood pressure and high cholesterol levels, which can contribute to circulation problems, can help prevent some of the complications of diabetes as well. A low dose of aspirin taken daily is recommended in people with risk factors for heart disease. Metformin (Glumetza, Fortamet, others) is generally the first medication prescribed for type 2 diabetes. Healthy eating need to center diet on more fruits, vegetables, proteins and whole grains foods that are high in nutrition and fiber and low in fat and calories and cut down on saturated fats, refined carbohydrates and sweets.

Physical activity lowers blood sugar level by moving sugar into cells, where it's used for energy. Exercise also increases sensitivity to insulin, which means body needs less insulin to transport sugar to cells.

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**Received:** July 7, 2021; **Accepted:** July 22, 2021; **Published:** July 29, 2021

**Citation:** Paraskeva T (2021) Anti-Diabetic Medicines. Pharm Anal Acta. 12: 639

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