

Your Diabetes Medications

Your health care provider will decide which medicine is best for you based on your age, your lifestyle, your health and your blood sugar levels. You should keep a list of all of your medications.

Try to know the following regarding your diabetes medications:

- Names of diabetes medication(s)
- When and how often to take the medication
- When it starts and how long the medication works
- Possible side effects
- Drug/food interactions
- What to do if you forget a dose

While all medicines can cause side effects, many are temporary. If you have side effects, talk to your health care team. Never stop taking medication on your own. You and your health care provider may need to change the dose or try a new one.

The chart on the next page will show you the names of the medications, where they work on the body and how they control blood sugar.

Type 2 Diabetes and Medications

Type 2 diabetes is a complex condition that results in high blood glucose levels because: 1) the pancreas does not produce enough insulin 2) the liver releases too much glucose 3) muscle cells do not readily take in glucose

There are five classes of oral diabetes medications. The picture of a body on the next page will further explain these agents. Here is an overview:

1. The **sulfonylureas** stimulate the pancreas to release more insulin.
2. The **meglitinides** also stimulate the pancreas, but more rapidly after eating than the sulfonylureas.
3. The **biguanides** keep the liver from releasing too much glucose, increase the muscle's sensitivity to insulin and improve some levels of blood fat.
4. The **alpha-glucosidase inhibitors** slow the digestion of complex carbohydrates.
5. The **thiazolidinediones** make the muscle more sensitive to insulin and help improve some levels of blood fat.
6. **Insulin** comes in many types: short-acting, intermediate, long-acting and pre-mixed. Insulin must always be injected.

The specific side effect from each class of drugs is pointed out in the picture of the body. Your health care provider will select your medications based on your individual needs. Your health care provider will also order any needed blood tests to determine which pill is appropriate for you. Routine follow-up blood testing will also be done according to specific drug guidelines. Always report any symptoms noted with a new drug to your health care provider immediately.

Description of Diabetes Medications

Class: Sulfonylureas

Main Site of Action: Pancreas

How It Controls Blood Glucose: Stimulates Pancreas to release more insulin

Generic: Glyburide, Glipizide, Glimepiride, Tolbutamide, Chlorpropamide, Tolazamide

Brand Names: Amaryl, Diabeta, Diabinese, Dymelor, Glucator XL, Glynase, Micronase, PresTab, Orinase, Tolinase

Side Effects: Hypoglycemia

Time to take: 1/2 hour before meals

Class: Biguanides

Main Site of Action: Liver

How It Controls Blood Glucose: Keeps liver from releasing too much glucose

Generic: Metformin

Brand Names: Glucophage

Side Effects: Stomach cramps

Time to take: With meals

Class: Meglitinides

Main Site of Action: Pancreas

How It Controls Blood Glucose: Stimulates Pancreas to release more insulin

Generic: Repaglinide, Nateglinide

Brand Names: Prandin, Starlix

Side Effects: Hypoglycemia

Time to take: With meals

Insulin: Replaces insulin made in the pancreas at meals

Generic: Regular, Lispro, Aspart

Brand Names: Novolin, Humalin, Humalog

Side Effects: Hypoglycemia

Time to take: With meals

Insulin: Replaces basal insulin secretion

Generic: NPH, Lente, Glargine, Ultralente

Brand Names: Novolin, Humalin, Lantus

Side Effects: Hypoglycemia

Time to take: Bedtime, with meals

Class: Thiazolidinediones

Main Site of Action: Muscle cells

How It Controls Blood Glucose: Makes muscle cells more sensitive to insulin

Generic: Pioglitazone, Rosiglitazone

Brand Names: Avandia, Actos

Side Effects: Liver damage, swelling of feet and legs

Liver functions tests are required

Time to take: With meals

Class: Alpha-glucosidase Inhibitors

Main Site of Action: Intestine

How It Controls Blood Glucose: Slows the digestion of some carbohydrates. After-meal blood glucose peaks are not as high

Generic: Acarbose, Miglitol

Brand Names: Precose, Glyset

Side Effects: Flatulence (Gas), diarrhea

Time to take: With meals