

There are many diabetes medicines in pill form that are used to treat some people with Type 2 diabetes. These medicines are used along with meal planning and exercise to improve blood sugar control.

These pills are not insulin. Insulin is only given by injection. Diabetes medicines are grouped into “Classes” according to how they work in the body.

CLASS: Sulfonylureas

Some sulfonylureas include:

Glyburide (brand names DiaBeta®, Micronase®, or Glynase®), **Glipizide** (brand name Glucotrol® or Glucotrol® XL), and **Glimpiride** (brand name Amaryl®):

These medications lower blood sugar by causing the pancreas to produce more insulin.

- May cause weight gain.
- Can cause blood sugar to drop too low (hypoglycemia). You may feel shaky, weak, confused, or hungry if you are hypoglycemic.
- These pills are taken once or twice a day.

- You need to eat within 30 minutes of taking these pills to reduce the chance of a low blood sugar.
- If you take any of these pills and skip meals or drink alcohol, you may have problems with low blood sugar.
- People with sulfa drug allergies may not be able to use sulfonylureas.

CLASS: Meglitinides and D-Phenylalanine Derivatives

Repaglinide and **Nateglinide** (brand names Prandin® and Starlix®):

These medications are similar to sulfonylureas and lower blood sugar by causing your pancreas to produce insulin immediately after eating.

- Clears from the body sooner than sulfonylureas.
- Helps keep glucose levels from rising too high after meals.
- May cause weight gain and low blood sugar.
- Repaglinide and nateglinide are taken up to 30 minutes before meals.
- If you skip a meal, do not take these medicines. You may need to take a half dose when eating a snack.

- These pills may interact with other drugs.
- People with kidney disease can take this medication.

CLASS: Biguanides

Metformin (brand name Glucophage® and Glumetza®):

These medications lower blood sugar by keeping your liver from releasing too much glucose.

- Makes your cells more sensitive to insulin.
- Does not raise your body's insulin levels.
- Metformin is often taken once or twice a day.
- Metformin does not cause low blood sugar.
- It may cause diarrhea as the body adjusts to taking it. Take it with food to avoid stomach upset.
- People with liver or kidney disease should not take metformin.
- **Caution:** If you are having a test with contrast dye such as a CT scan, MRI or a heart catheterization, stop taking metformin for at least 24 to 48 hours after you have the test. Check with your doctor.

CLASS: Insulin Sensitizers/ Thiazolidinediones

Rosiglitazone (brand name Avandia®) and **Pioglitazone** (brand name Actos®):

These medications lower blood sugar by improving cell response to insulin.

- Decreases the release of glucose by the liver.
- Increases the insulin action in muscles.
- These pills are often taken once a day at breakfast.
- Liver enzymes need to be tested before starting the medicine and regularly while taking these drugs.
- Talk to your doctor if you are using birth control or considering pregnancy.
- Sometimes it takes 4 to 6 weeks to see the full benefit of these medicines.
- Retaining fluid and swelling are the most common side effects. People with heart failure may not be able to use these medicines.

CLASS: Alpha-Glucosidase Inhibitors

Acarbose and **Miglitol** (brand names Precose® and Glyset®):

These medications slow the breakdown of carbohydrates during digestion.

- Keep blood sugar from rising quickly after eating.

- Do not cause hypoglycemia or weight gain.
- Alpha-Glucosidase Inhibitors need to be taken with the first bite of the 3 largest meals of the day.
- Possible side effects include bloating, nausea, diarrhea, excess gas, and abdominal pain.

CLASS: DPP-4 Inhibitors

Sitagliptin, Saxagliptin, Linagliptin, and Alogliptin (brand names Januvia®, Onglyza®, Tradjenta®, and Nesina®)

DPP-4 inhibitors enhance the body's own ability to control blood sugar levels.

- These pills are taken once a day.
- Common side effects of DPP-4 inhibitors include stuffy or runny nose, sore throat, headaches, and upper respiratory tract infections

CLASS: SGLT2 Inhibitors

Canagliflozin, Dapagliflozin, and Empagliflozin (brand names Invokana®, Farxiga®, and Jardiance)

These medications block the re-absorption of glucose in the kidney (through SGLT inhibition) leading the body to excrete large amounts of glucose in the urine.

- These pills are taken once a day at breakfast.
- Side effects may include trouble passing urine or a change in the amount of urine; penile discharge, itching, or pain in

men; and vaginal discharge, itching, or odor in women.

- People with kidney disease may not be able to take SGLT2 inhibitors or may require lower doses.

CLASS: Dopamine Receptor Agonist

Bromocriptine mesylate (brand name Cycloset®)

The exact way this medication lowers blood sugar is unknown. It acts upon the central nervous system to reset and improve control of metabolism to:

- Decrease after-meal high blood sugar.
- Lower blood lipid (triglyceride) levels.
- Side effects include nausea, fatigue, vomiting, headache, and dizziness.
- Take within 2 hours of waking in the morning.
- Take with food to avoid stomach upset.
- These medications are not commonly used to treat Type 2 diabetes.

CLASS: Combination Medicines

Sometimes your doctor may prescribe a combination medication, which contains two different types of diabetes medicines. This may make it easier to take your medicines correctly and better manage your diabetes. It may help lower your cost of medicines.

Some combination medicines include:

- Actoplus Met® – pioglitazone and metformin
- Duetact® – pioglitazone and glimepiride
- Glyxambi® – empagliflozin and linagliptin
- Invokamet® – canagliflozin and metformin
- Janumet® – sitagliptin and metformin
- Kombiglyze XR® – saxagliptin and metformin XR
- Metaglip® – glipizide and metformin
- PrandiMet® – repaglinide and metformin

Your doctor will decide with you what pill or pills are best for you.

- Be sure to let your doctor know about any other medicines you are taking before starting any diabetes pills.
- Ask your doctor, nurse, or pharmacist for information about the specific medicine that you are taking. Share your questions and concerns with your healthcare providers.