

Choosing Drugs: Oral Diabetes Drugs

If You Have Type 2 Diabetes

When you have diabetes, you have too much glucose, or sugar, in your blood. This can cause serious health problems, such as heart disease, stroke, and blindness. People with diabetes who do not lower their blood sugar usually live about 8 years less than people who do not have diabetes.

Lowering Your Blood Sugar

Some people with type 2 diabetes can lower their blood sugar by changing the way they eat, by exercising, and by losing weight. Over time, most people also need an oral diabetes drug.

The Best Drugs at the Lowest Cost

There are 6 groups of oral diabetes drugs. Each group has a different active ingredient and works in a different way. The chart on the other side of this fact sheet compares the 6 groups of drugs.

Newer drugs cost more, but they might not work better.

For example, Starlix, Januvia, and Onglyza are newer, brand-name drugs. They cost \$238 to \$282 per month. But they do not lower blood sugar as well as the older, generic drugs, like metformin and glipizide, which cost only about \$4 to \$35 per month.

Newer drugs might not be safer. All oral diabetes drugs can have side effects, such as low blood sugar that is too low (hypoglycemia), weight gain, nausea, and swelling in the legs and ankles (edema). Older drugs have been around longer, so the side effects are better known. Two of the newer drugs, Actos and Avandia, are linked to a higher risk of heart failure and bone fractures. Because of its risks, our medical advisors recommend that Actos only be a last resort choice. Avandia, and combination products that contain it, Avandamet and Avandaryl, are no longer available at pharmacies. Your doctor must register you into a special program to use them.

Two drugs might work better than one. Some people need 2 drugs to lower their blood sugar to a normal range. However, taking more than one diabetes drug raises the risk of side effects and increases costs.

Our advice:

We chose the following as **Consumer Reports Best Buy Drugs**. All are low-cost generics. Discuss these choices with your doctor.

- **Metformin and Metformin Sustained Release** alone or with glipizide or glimepiride
- **Glipizide and Glipizide Sustained Release** alone or with metformin
- **Glimepiride** alone or with metformin

We recommend trying metformin first, unless you have kidney disease or heart failure. If metformin does not lower your blood sugar enough, ask your doctor to add glipizide or glimepiride.

For more information on diabetes drugs and many other medicines, visit our free website, www.CRBESTBUYDRUGS.org

You could save hundreds of dollars a month by switching to generic metformin, a Consumer Reports Best Buy Drug.



Advantages and Disadvantages of the Oral Diabetes Drugs

Our evaluation is based on a recent scientific analysis by the Johns Hopkins University-evidence based Practice Center, along with the Oregon Health and Science University-based Drug Effectiveness Review Project. This is a summary of a longer, more detailed report you can find at www.CRBESTBUYDRUGS.org.

Consumer Reports Best Buy Drugs are in blue. We recommend these drugs because they are effective, generally safe, and cost less. Work with your doctor to choose the best drug or drugs for you.

Group	Advantages	Disadvantages
<i>Biguanides</i> generic Metformin	<ul style="list-style-type: none"> • Low risk of low blood sugar • Does not cause weight gain • Drop in triglycerides¹ • No rise in blood pressure • Low cost: \$4 to \$35 per month or less² 	<ul style="list-style-type: none"> • High risk of nausea, bloating, and diarrhea • Not safe for people who have kidney disease or heart failure • Might need to take 2 to 3 times a day
<i>Sulfonylureas</i> generic Glipizide , Glimepiride , and Glyburide	<ul style="list-style-type: none"> • Fast-acting • No rise in blood pressure or bad (LDL) cholesterol³ • Take once a day • Low cost: \$4 to \$20 per month or less² 	<ul style="list-style-type: none"> • Weight gain of 5 to 10 pounds • Higher risk of low blood sugar
<i>Alpha-glucosidase Inhibitors</i> generic Acarbose and brand-name Glyset	<ul style="list-style-type: none"> • Low risk of low blood sugar • Does not cause weight gain • Drop in triglycerides¹ • No rise in cholesterol 	<ul style="list-style-type: none"> • Less effective than most other diabetes pills • Higher risk of nausea, vomiting, and diarrhea • High cost: \$78 to \$200 per month
<i>Thiazolidinediones</i> brand-names Actos and Avandia , and generic Pioglitazone	<ul style="list-style-type: none"> • Less risk of low blood sugar than Sulfonylureas • Slight rise in good (HDL) cholesterol⁴ • Drop in triglycerides (Actos) 	<ul style="list-style-type: none"> • Higher risk of heart failure • Higher risk of heart attack (Avandia only) • Higher risk of bladder cancer (Actos only) • Weight gain of 5 to 10 pounds • Risk of fluid build-up (edema) and low blood iron (anemia) • Rise in bad (LDL) cholesterol³ • High cost: \$176 to \$419 per month
<i>Meglitinides</i> brand-names Prandin and Starlix , and generic Nateglinide	<ul style="list-style-type: none"> • Fast-acting • No rise in cholesterol 	<ul style="list-style-type: none"> • Risk of low blood sugar and weight gain of 5 to 10 pounds (Prandin only) • Less drop in blood sugar with Starlix than Sulfonylureas • High cost: \$142 to \$347 per month
<i>DPP-inhibitors</i> brand-name Januvia and Onglyza	<ul style="list-style-type: none"> • Low risk of low blood sugar • Few known side effects (but they are new drugs) 	<ul style="list-style-type: none"> • Less effective than several other diabetes drugs • Less known about potential side effects compared to older drugs • High cost: \$275 to \$282 per month

¹ Triglycerides are a kind of fat in the blood that can clog the arteries and cause heart disease.

² A three-month supply of these drugs may cost as little as \$10 through programs offered at some chain and independent pharmacies, and some grocery stores. Some programs have restrictions.

³ LDL cholesterol is a kind of fat that can build up on the walls of blood vessels and contribute to heart disease.

⁴ HDL cholesterol is called good cholesterol because it helps remove LDL (bad) cholesterol from the blood.