

Project **CODE**

COmprehensive **D**iabetes and **E**ye Care

Supported by



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Patient Education Series
Oral Medication in Diabetes

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Oral Medication

Who can manage their diabetes without insulin injections and only with tablets?

Only type 2 diabetics can manage their diabetes with tablets.

If you are a type 1 diabetic you will need insulin injections, and the doctor might also prescribe tablets.

If you are pregnant or trying to conceive you cannot take tablets as these might affect the baby. You have to inject insulin.

If you are a type 2 diabetic with very high sugars you may be put temporarily or permanently on insulin, with or without additional tablets.

Will I need tablets?

If you have just found out that you have diabetes, your doctor might first prescribe changes in your diet and an exercise routine to try and control your diabetes. If this does not reduce your blood sugars enough doctor will **also** prescribe tablets to help control your diabetes.

If your blood sugars are high at the time of diagnosis your doctor will start you on tablets immediately, along with changes to your diet and exercise routine.

Taking tablets regularly

It is very important to take these tablets regularly and at the correct time, to control your diabetes.

This will ensure that you don't develop complications that come from high sugars, which can affect many organs like eyes, kidney, heart, and also your ability to fight off infections. Your doctor will tell you if how many minutes before your meal your tablet should be taken. Some tablets may also have to be taken along with your meal or just afterwards. It is very important to follow these instructions carefully so that you avoid low blood sugar episodes.

What are the tablets I have to take? How do they work? What are some possible side-effects?

1. Metformin- This is the first choice for most diabetics.

Metformin works in 3 ways. Most importantly it makes cells in your body sensitive to insulin so glucose is driven into the cells from the blood. It also decreases the absorption of carbohydrates by the intestines. And thirdly it reduces the amount of glucose produced by the liver.

Metformin does not increase the production of insulin.

It can affect your kidneys, so if you have a problem with your kidneys you may not be given this drug. In any case, your doctor might ask you to do the kidney function tests periodically. (This is a blood test.)

Metformin may also cause gastrointestinal effects, like gas, stomach ache or uneasiness and upset stomach. So your doctor may start with a lower dose and gradually increase it so that your body can get used to the medicine.

Metformin does not cause weight gain and often causes weight loss.

2. Sulfonylureas

Here are some commonly used sulfonylureas and their brand names are given in brackets alongside.

glypizide(Glucotrol)
glyburide(Diabeta, Micronase, Glynase)
glimepiride (Amaryl)
gliclazide (Diamicron)

These drugs are given as a second line of treatment when metformin alone is not able to lower the sugars enough. It is also sometimes given as the first choice if the patient is not overweight.

These drugs reduce blood sugar by increasing insulin production in the pancreas. These drugs have to be taken before food. Don't take the medicine if you are going to miss your meal.

The important side-effect you should watch out for is hypoglycemia or low blood sugar episodes. Since these tablets increase your insulin, if you eat less food than usual, or miss a meal or are having difficulty digesting your food your blood sugar can drop causing you to feel weak, dizzy, dis-oriented.

All these drugs cause weight gain.

3. Other drugs : Some other tablets can be given in combination with metformin or sulfonylureas, like

(1) thiazolidinediones
rosiglitzone(Avandia)
pioglitazone(Actos)

Watch out for oedema while taking this medicine. There is also some concern for heart function on taking these drugs

OR (2) α -glucosidase
miglitol(Glyset)
acarbose(Precose/Glucobay)

Side-effects of this drug include gas and bloating.

Dealing with side-effects

Make sure you ask the doctor about any side-effects that you are likely to experience because of the tablets prescribed.

Side-effects are not always experienced by everyone who takes tablets for diabetes. But, it is very important to note down any changes you are experiencing, especially any new symptoms, after starting the medicine. Make sure you tell your doctor about these. The doctor may put you on another medicine or change the dosage of your medicine.

Checking your Blood Sugar

As a diabetic you have to check your blood sugar regularly. It is also important to check your sugars after starting a new medication, to check if the medicine is lowering your sugars to the right extent.

Drug interactions

Sometimes two medicines that are given for two different problems can react with each other and cause problems for your health.

Always tell any doctor you are going to about your diabetic medication, so they can give you medicine that are safe to take along with your diabetes tablets.

Will I also have to take insulin injections?

Diabetes tablets don't work for everyone. Sometimes the tablets reduce the blood sugar, but not to the extent needed. Sometimes a tablet which has been working well stops working over time. When this happens your doctor may change the medicine or give you a combination of medicines.

If your blood sugar still remains unacceptably high, you might have to start insulin injections. Sometimes you might need insulin injections for a short period of time, like

- if you are having surgery or
- a severe infection or
- are under a lot of stress.