

## **PATIENT INFORMATION: GLUCOPHAGE (METFORMIN)**

Glucophage is a medication used to lower blood sugar in people with diabetes. Glucophage lowers the amount of sugar in your blood by helping your body respond better to its own insulin. It does not cause your body to produce more insulin. Therefore, it rarely causes hypoglycemia (low blood sugar) and it doesn't usually cause weight gain.

Glucophage, like other blood-sugar lowering medications, can cause side effects in some patients. Most of these side effects are minor and will go away after a while. However, there are also serious, but rare side effects. If side effects occur, they usually occur during the first few weeks of therapy. They are normally minor ones such as diarrhea, nausea, and upset stomach. Taking your Glucophage with meals can help reduce these side effects. Although these side effects are likely to go away, call your doctor if you have severe discomfort or if these effects last for more than a few weeks. Some patients may need to have their dose lowered or stop taking Glucophage, either temporarily or permanently. Although these problems occur in up to one-third of patients when they first start taking Glucophage, you should tell your doctor if problems come back or start later on during the therapy. About three out of one hundred people report having a temporary unpleasant or metallic taste when they start taking Glucophage.

Glucophage rarely causes serious side effects. The most serious side effect that Glucophage can cause is called lactic acidosis. Lactic acidosis is caused by build up of lactic acid in the blood. Lactic acidosis associated with Glucophage is rare and has occurred mostly in people whose kidneys were not working normally. Lactic acidosis has been reported in about one in 33,000 patients taking Glucophage over the course of a year. Although rare, if lactic acidosis does occur, it can be fatal in up to half the cases. It's also important for your liver to be working normally when you take Glucophage. Your liver helps remove lactic acid from your bloodstream. Your doctor will monitor your diabetes and may perform blood tests on you from time to time to make sure your kidneys and your liver are functioning normally. There is no evidence that Glucophage itself causes harm to the kidneys or liver.

Your risk of developing lactic acidosis from taking Glucophage is very low as long as your kidneys and liver are healthy. However, some factors can increase your risk because they can affect the kidney and liver function. You should not take Glucophage if:

- You have chronic kidney or liver problems
- You drink alcohol excessively (all the time or short-term "binge" drinking)
- You are seriously dehydrated (have lost a large amount of body fluids)
- You are going to have certain X-ray procedures with injectable contrast agents
- You are going to have surgery
- You develop a serious condition such as a heart attack, severe infection, or a stroke.

Symptoms of lactic acidosis include: feeling very weak, tired, or uncomfortable; unusual muscle pain, trouble breathing, unusual or unexpected stomach discomfort, feeling cold, feeling dizzy or lightheaded, or suddenly developing a slow or irregular heartbeat.

If you notice these symptoms, or if your medical condition has suddenly changed, stop taking Glucophage and call your doctor right away. Lactic acidosis is a medical emergency that must be treated in the hospital.

To reduce the risk of lactic acidosis tell your doctor if you have an illness that results in severe vomiting, diarrhea and/or fever, or if your intake of fluids is significantly reduced. These situations can lead to severe dehydration, and it may be necessary to stop the Glucophage temporarily. You should also let your doctor know if you are going to have any surgery or specialized X-ray procedures that require injection of contrast agents. Glucophage therapy will need to be stopped temporarily in such instances.

Please discuss any questions you have about Glucophage with your doctor.