

## What is Metformin?

Metformin (Glucophage) is a drug which is very effective for lowering blood sugar. It is swallowed as tablets that are best taken 10 – 15 minutes after starting a meal. It is usually prescribed if your blood sugar levels remain raised despite changes to your diet and so it is often the first drug used to treat diabetes. In addition it is used in combination with other tablets to lower blood sugar and also in combination with insulin. In time it becomes more difficult to keep the blood sugar normal so the dose of metformin is often gradually increased. Depending on the strength of the tablets the maximum dose is between 3–6 tablets a day.

## What is Diabetes?

Diabetes occurs when the body does not produce enough insulin. This is the major hormone that lowers blood sugar. It also occurs because the ability to respond to insulin is much reduced (insulin resistance). Metformin works by improving this resistance to the effects of insulin. It does this mainly by reducing the amount of sugar produced by the liver, especially overnight. It also improves the amount of sugar used by muscle cells during activity.

## Side Effects of Metformin

The commonest side effects are stomach cramps, indigestion, diarrhoea and sickness. To reduce the risk of side effects of metformin, it is usually started at a low dose and slowly increased to the intended amount. If side effects do occur they usually improve if the dosage is reduced.

## Benefits of Taking Metformin

We know that metformin will reduce the risk of developing a heart attack, a stroke and circulation problems in the legs as well as lowering blood glucose levels. It is also the least likely of all the drugs used to treat diabetes to cause an increase in your weight and when used on its own is very unlikely to cause an abnormally low blood sugar attack ('a hypo').

## Further information

You will find further information in the leaflet that comes with the tablets.

**Contact: Dr Martin Smith**  
**Diabetes & Endocrinology**  
**Tel.: 01722 336262 ext. 4229**

If you need this information in another language or medium (audio, large print, etc) please contact the Patient Advice and Liaison Service (PALS) on 0800 374 208 email: [palservice@salisbury.nhs.uk](mailto:palservice@salisbury.nhs.uk)

You are entitled to a copy of any letter we write about you. Please ask if you want one when you come to the hospital

We ask for information about you so that you can receive proper care and treatment. This information remains confidential and is stored securely by the Trust in accordance with the Data Protection Act 1998.

Author: M Smith  
Date written: March 2006  
Approved: March 2006  
Review date: March 2009  
Code: CSNew96