# **Selsey Medical Practice**

## Starting Metformin - Reduced dose due to Kidney Impairment v1.0

You have been advised to start a medication called Metformin. Metformin is usually the first medication prescribed for people with Type 2 Diabetes when a healthy diet and physical activity alone haven't helped enough to control your blood glucose levels.

Metformin works by reducing how much glucose is released by the liver and by making your body use your own insulin more effectively by reducing insulin resistance. There is no risk of low blood sugar levels when taking metformin unless you are already using certain other medications which lower sugar levels (insulin, gliclazide, glimepiride, tolbutamide).

By taking Metformin to reduce your sugar levels you will help reduce the risk of long term complications caused by diabetes. Whatever your sugar levels are it is recommended that you take the maximum tolerated dose of Metformin as per the schedule below. Due to your kidney function we suggest taking half the normal maximum dose. Your dose and this letter have been adjusted to take your kidney function into account.

## **Potential Side effects**

The most common side effect with Metformin are digestive problems, such as nausea, vomiting, diarrhoea, abdominal pain, increased flatulence and loss of appetite. The risk of these can be reduced by introducing the medication gradually. Most people can take the recommended dose of Metformin without any problems.

Metformin can be dangerous if you are dehydrated and your kidneys are not working well. **Due to your kidney function you should ideally have your kidney function checked twice a year to ensure this dose of Metformin remains suitable.** The dose of Metformin which you take may need to be reduced or even stopped if your kidney function worsens which can happen with age.

#### Sick Day Rules

If you have a prolonged period of vomiting and/or diarrhoea then you should stop taking your Metformin and contact your doctor.

### **Starting Metformin**

You should take Metformin tablets with meals with the aim of taking one 500mg tablet twice a day (with breakfast and your evening meal). The dose should be increased gradually as followed:

- Week 1 Take 500mg with breakfast
- Week 2 Take 500mg with breakfast and evening meal (max dose recommended)

If you developed persistent side effects at any stage then reduce to the dose which was tolerated and continue this while arranging to discuss with your doctor or diabetes nurse at the surgery. We may consider switching to a long acting tablet which may be better tolerated.

You should have a blood test (Hba1c) three months after reaching a stable dose of Metformin, to see how much it has improved your sugar levels and whether any additional medication is recommended. The medication will work best with a diet that has reduced levels of carbohydrate and refined sugars combined with increased physical activity.