

## Diabetes MODY

MODY is an acronym for Maturity Onset Diabetes of the Young

Diabetes comes in many forms, one of which is Maturity Onset Diabetes of the Young, or MODY. This type of diabetes is more likely to be inherited than other types of diabetes, due to a stronger genetic risk factor.

MODY is sometimes compared to type 2 diabetes, and shares some type 2 diabetes symptoms.

However, MODY is not linked to obesity, and typical MODY patients are young and not necessarily overweight.

### What is MODY diabetes?

Maturity Onset Diabetes of the Young affects approximately one or two per cent of people who have diabetes, and may often go unrecognised in its early stages.

It is a form of diabetes that develops before the patient reaches 25.

It also runs in families, and can pass from one generation to the next. MODY does not always require insulin treatment.

### Why is MODY inherited so easily?

MODY is directly caused by the change in a single gene, and all children of an affected parent have a 50 per cent chance of inheriting this gene, and consequently developing MODY themselves.

### Why does MODY differ from other strains of diabetes, why does it matter?

Knowing and understanding MODY and even the different forms of MODY (six types have been identified), means that the affected person can be treated in the most appropriate way possible.

Advice can also be provided about how the disease will progress, and what complications can be expected. Furthermore, other family members can be advised about the risks of inheriting the disease.

### What are the different types of MODY?

The most common MODY type is **HNF1 alpha**. This is responsible for 70% of MODY.

The amount of insulin produced by the pancreas becomes less as the person gets older, and MODY develops during adolescence or the early twenties.

**Glucokinase** is the second type of MODY, and occurs when this gene (that aids the body in recognising blood glucose levels) malfunctions.

This type of MODY can be hard to identify, and symptoms can be particularly slow in manifesting themselves.

It is usually picked up during routine testing. When a person is pregnant, it is important to screen for it.

**HNF4** - alpha is a less common form of MODY that is often diagnosed at a later stage.  
**HNF1** - beta is a type of MODY associated with renal cysts.

**PDX1** and **IPF1** are the same type of MODY, and are incredibly rare, affecting only one UK family to date.

NeuroD1 is another rare type of MODY, affecting only two families in the UK. Little information is available about the rarer forms of MODY.

### **What complications are caused by MODY?**

It has recently been found that MODY can initiate complications. Managing the disease strictly is just as important for MODY patients as other types of diabetic.

### **Dr Shahjada Selim**

Assistant Professor

Endocrinology Department

Bangobandhu Sheikh Mujib Medical University, Dhaka

Chamber:

### **COMFORT DOCTOR'S CHAMBER**

165-166, Green Road, Dhaka, Bangladesh

Mobile: 01731 956033, 01552 468377, 01919000022