DIABETES – GLOSSARY OF TERMS

Diabetes is a common condition, which most people have some understanding of, but when you listen to people talk about it, you may feel as if it has language of its own – full of words and terms that you have never heard of.

It does not matter if you are newly diagnosed or have been diagnosed for some time, it always helps to refresh your understanding of the everyday words used in diabetes, as terms can change.

Rather than assuming you know the meanings of the words used, listed here alphabetically, are the most common ones you will hear when you are discussing your diabetes with your care team.

A. Annual review is an essential check of your health that everyone with diabetes should have once a year. It includes various blood tests and physical examinations and also offers an opportunity to chat with your diabetes healthcare team about your diabetes and any issues relating to it.

Autoimmune is where something goes wrong with the immune defence and the cells of your own body are attacked. This is seen in Type 1 diabetes, as the insulin producing cells of the pancreas are destroyed by a process in the body known as "autoimmunity" in which the body's cells attack each other, leading to loss of insulin production.

A1c See HbA1c

B. Beta cells are cells in the islets of your pancreas that produce insulin.

Blood glucose level is the amount of glucose in your blood.

Blood glucose meters are electronic machines (biosensors) that your diabetes care team and you can use to test your current blood glucose level.

Blood Pressure is the amount of force exerted by your blood against the walls of your arteries. Two things are measured when your blood pressure is taken. The units are expressed in millimetres of mercury, for example, 120/70mmHg. The systolic pressure is the top number and is the pressure in the arteries when the heart is forcing blood through them. The diastolic pressure is bottom number and is the pressure in the arteries when the heart relaxes.

Blood glucose test strips are the test strips used with a blood glucose meter. You insert a strip into a blood glucose meter, prick your finger and place the blood sample on the strip. The meter reads the strip and gives your current blood glucose level.

Body Mass Index (BMI) is an expression of adult weight in relation **to** height.

C. Carbohydrates come from food that we digest. During digestion carbohydrates are broken down into glucose. They are the main source of energy in our diet and include all sugars and starches, for example: pasta, bread, rice and potatoes.

Cardiovascular disease (CVD) refers to diseases of the heart and circulatory system, including coronary heart disease (CHD) and stroke.

Cholesterol is present in certain foods and is also produced by your liver. There are two types of cholesterol, HDL, which is good, and LDL, which is bad. Your cholesterol profile should be checked regularly by your care team to ensure the levels are appropriate to you.

D. **Dextrose** is pure glucose.

Diabetic ketoacidosis (DKA) This dangerous condition is caused by blood turning acidic from a high level of ketones being released into your blood. It occurs as a result of high blood sugars and too little insulin.

Diabetes mellitus is a condition in which the amount of glucose (sugar) in the blood is too high because the body cannot use it properly.

Diabetes specialist nurses (DSNs) are key to your care plan and are nurses with specialist training in diabetes.

Diabetologists are doctors specialising in diabetes.

Diet is an important part of the management of your diabetes. You should eat a healthy, balanced diet that is low in saturated fat, salt and sugar, and high in fruit and vegetables.

Dietitians can offer you specialist advice on healthy eating and the impact of different foods on your diabetes control.

E. Erectile dysfunction (or impotence) is the inability to get and/or keep an erection for sexual intercourse, in men with diabetes.

This is because of poor blood supply to the penis and/or nerve damage caused by diabetes complications.

- **F. Fasting blood glucose** is a blood glucose test taken before eating, usually in the morning, and is used when diagnosing diabetes.
- G. Gestational diabetes is a type of diabetes discovered during pregnancy (usually during the second or third trimester), and occurs if the body does not produce enough insulin to meet the extra needs of pregnancy. The symptoms usually disappear after childbirth, but there is an increased risk of acquiring Type 2 diabetes later on in life.

Glucagon is a hormone produced in the pancreas, which raised the blood glucose level. It is produced in the alpha cells in the islets of Langerhans in your pancreas. Glucagon can be given by injection to reverse a severe hypo.

Glucose is a simple type of sugar that comes from the digestion of starchy foods (bread, rice, potatoes, chapatis, plantain, etc.), from sugar and sweet foods, and from the liver that makes glucose.

Glycaemic index (GI) this is a method used to rank foods according to how they effect blood glucose levels.

H. **HbA1c** is a blood test showing how much glucose has bound to your red blood cells over the previous two to three months and is a good indicator on overall glucose control. It is expressed as a percentage.

Hyperglycaemia (or a 'hyper') means high glucose levels.

Hypoglycaemia (or a 'hypo') means low blood glucose levels (less than 4 mmol/l).

Hypertension means high blood pressure, which can lead to stroke, heart problems and kidney disease.

I. IDDM is Insulin Dependent Diabetes Mellitus, known as type 1 diabetes.

Impaired glucose tolerance (IGT) and Impaired fasting glycaemia (IFG) are conditions where glucose levels are higher than normal, but not high enough to diagnose diabetes. People with IGT or IFG have an increased risk of cardiovascular disease and may go on to develop Type 2 diabetes.

Insulin is a hormone produced naturally in humans and animals in the beta cells of the pancreas. Insulin helps glucose in the blood enter your body's cells where it is used as fuel by your body.

Insulin resistance is where your body is unable to make proper use of insulin due to a lack of sensitivity at cell level. This affects tissue particularly around the abdomen, hips and thighs known as adipose tissue.

- J. **Juvenile diabetes** is diabetes in childhood and adolescence.
- K. Ketone test strips test for the presence of ketones (see diabetic ketoacidosis).
- L. Lancets are needed for blood glucose testing. You insert them into a finger-pricking device to prick your finger to obtain a drop of blood, which is then used for a blood glucose test.

Lipids are fatty substances in the blood, for example, cholesterol and triglycerides.

Long-acting insulin is insulin with a very long action time, up to 24 hours.

M. Maturity onset diabetes of the young (MODM) is a rare type of diabetes that develops before the age of 25, runs in families and can often be controlled by diet and physical activity alone, or by activity and tablets.

Microalbuminuria is the presence of small amounts of protein in urine. The protein appears during the first stages of kidney disease.

Mody Maturity Onset Diabetes of the Young is a special kind of diabetes that is inherited.

Multiple injection treatment is a treatment with injections of short or fast acting insulin before meals and intermediate or long acting insulin usually used before bedtime.

N. Nephropathy is a complication of diabetes that results from damage to the kidneys.

Neuropathy is damage to the nerves, which carry messages to and from the brain and spinal cord. It is caused by many years of high blood glucose levels. The symptoms include pins and needles, numbness or pain in the feet or hands.

O. Ophthalmologists are doctors with specialist raining in the diagnosis and treatment of diseases affecting the eyes.

Optometrists are trained to perform eye examinations and test for eye problems. They do not treat eye disorders (see ophthalmologists).

Oral Hypoglycaemic Agents are also called diabetes tablets, there are several types:

* Sulphonylureas

- * Thiazolidinediones (Glitazones)
- * Alpha-glucosidase inhibitors
- * Biguanides

* Post-prandial glucose regulators

P. **Pancreas** is the organ in your abdominal cavity that produces digestive enzymes (released into the intestine) and different hormones (released in your blood) including insulin.

Physical activity is an important part of managing diabetes as it helps to lower blood glucose levels.

Podiatrists (also called chiropodists) are healthcare professionals with expert knowledge in feet and foot care.

Proteinuria refers to large amounts of protein in the urine due to kidney damage from having high blood glucose levels. It is detectable by routine dipsticks and generally a sign of more advanced kidney disease.

R. Retinopathy is a complication of diabetes that can lead to blindness and results from damage to the blood vessels in the back of the eye due to many years of high blood glucose levels.

Retinal screening refers to regular eye examinations where the pupils are dilated to detect any early changes at the back of the eye, which could be signs of retinopathy. You should have your eyes examined at least once a year.

S. Sensor is the name given to the test strip needed with your blood glucose monitor to test your blood glucose levels.

Sharps are any sharp medical device, such as needles or lancets. After use, sharps need to be disposed of safely in a sharps bin.

Subcutaneous is the fatty area under the skin. This is the area used when injecting insulin.

- T. **Type 1** diabetes develops if the body is unable to produce any insulin. This type of diabetes usually appears before the age of 40. It is treated with a healthy diet, insulin injections and regular physical activity.
 - **Type 2** diabetes develops when the body can still make some insulin, but not enough, or when the insulin that is produced does not work properly (known as insulin resistance). This type of diabetes usually appears in people over the age of 40. It can be treated in a variety of ways: by diet and physical activity alone: by diet, physical activity and tablets: or by diet, physical activity and insulin injections.
- U. Urine test strips the method used before the availability of blood glucose testing to test for glucose. Urine testing only shows that your blood glucose level has been high, not what the level is or has been.
- V. Venous blood test used to take a blood sample from a blood vessel (vein).

This glossary is by no means comprehensive, but it will give you a good background and understanding of the basic everyday words and phrases you will come across when learning and discussing your diabetes.