## WHAT IS DIABETES?

Diabetes is a disease in which your body cannot properly use and store sugar, which is a principle fuel for the body. Diabetes is due to a lack of insulin production in the pancreas (TYPE I) or a resistance to the actions of insulin in the body (TYPE II). The sugar that is not used by the body builds up in the bloodstream and is washed out of the body through the kidneys. As a result you may feel thirsty and may urinate a lot. You may feel fatigue, thirst and visual blurring. These are all symptoms of Diabetes.

Approximately 3% to 5% of the adult population has unrecognized type 2 diabetes. All patients with coronary artery disease should be checked for diabetes and should know their blood sugar levels.

Diabetes is diagnosed based on blood glucose (sugar) levels. The diagnostic criteria are:

**GLUCOSE LEVELS FOR DIAGNOSIS OF DIABETES**

| Category | FPG (fasting plasma glucose) mmol/L | PG 1 hour after 75 GM. Glucose load;mmol/L | PG 2 hour after 75 GM. Glucose load;mmol/L |
|---|---|---|---|
| Impaired fasting glucose (IFG) | 6.1-6.9 | N/A | N/A |
| Impaired glucose tolerance (IPT) | < 7.0 | N/A | 7.8-11.0 |
| Diabetes Mellitus (DM) | ≥ 7.0 | N/A | ≥11.1 |
| Gestational Diabetes Mellitus (GDM) | ≥ 5.5 | ≥10.6 | ≥8.9 |

High level of sugar in the blood due to lack of or resistance to insulin contributes to the development of atherosclerosis (hardening of the arteries), kidney failure and other complications of diabetes such as eye damage (retinopathy) and nerve damage (neuropathy). Diabetics with no previous heart attack have the same risk for heart attack or stroke as a patient who has already had a heart attack. Recent studies have shown that tight aggressive blood sugar control lessens the complications of diabetes. Furthermore we must be even more careful to control other cardiac risk factors, such as high cholesterol and high blood pressure in the patients with diabetes in order to lessen their complication rate. The cholesterol targets for a diabetic are the same as a patient with established CAD.

Diabetes is treated by diet, weight reduction and regular exercise. In some patients,oral medications or self-administered insulin injections are required. Diabetes may be monitored by finger prick ( capillary) blood glucose measurements (Target FBS 4-7 mmol/L;1-2 hour post meal BS 5-11 mmol/L). Glycated Hemoglobin (HbA1c assay) gives a measure of long term blood glucose control the target for HbA1C is < 115. For further information on diabetes contact the Canadian Diabetes Association or visit their website at http://www.diabetes.ca/.