DIABETES AND EXERCISE

Health Canada reports that approximately 6.6% of Canada's population, age 20 and older, have been diagnosed with diabetes, and researchers expect an increase to 2.4 million Canadian diabetics by 2016. Also, 6% of Canadian women 46-64 years old, have this disease, and that increases to 10% in the 65 and older group. A woman with type 2 diabetes has an 8 times greater chances of developing heart disease than a women without diabetes. These are sobering numbers, especially in view of the fact that much of that is preventable by making some lifestyle changes.

Some of the changes that will lower your risk of diabetes include:

1. stop smoking
2. limit use of alcohol
3. monitor blood pressure and cholesterol levels
4. lose weight through a healthy diet – check out Health Canada for tips on healthy eating
5. get active – physical activity plays a strong role in preventing type 2 diabetes.

Training with Diabetes

Exercise is a very important tool in diabetic care. The benefits of a diabetic person adding exercise to medical treatment include:

1. possible improvement in the blood glucose levels of type 2 diabetics
2. exercise can create an improved insulin sensitivity, which means that the type 2 diabetic might be able to reduce the amount of medications taken (always under advice of your doctor).
3. cardiovascular health improves, reducing the risk of cardiovascular diseases, not just for diabetics, but for everyone. About 80% of diabetics will die of heart disease or stroke.

People living with diabetes may be taking insulin or oral hypoglycaemic medications. Exercise often increases the absorption of injected insulin and so it's very important to monitor blood glucose levels before, during, and after an exercise session. The most significant effect of both these kinds of medications is that they may cause hypoglycaemia during exercise testing and exercise training. So it is vital to keep a close eye on the timing of medication, food intake, and blood glucose levels.

Physical activity for diabetics without significant complications should include suitable endurance and resistance work. This can increase cardiovascular conditioning, muscle strength and endurance, and improve body composition, i.e., decreasing stored body fat and increasing lean muscle mass. Physical activity should include large muscle activities, such as walking, swimming and cycling. Strength training could include free weights, machines, or tubing. Consult Deb for programming specific to your individual needs.

A diabetic should not exercise if:

1. s/he has any active retinal haemorrhage, or has recently had treatment for retinopathy, such as laser treatment
2. is sick, or is suffering with an infection
3. blood glucose is above 14 mmol/L (250 mg/dl) and ketones are detected (blood glucose must be reduced before you engage in exercise)
4. blood glucose is lower than 4 mmol/L (70 ml/dl), because of the increased risk of hypoglycaemia. You may be able to eat some carbs to increase the blood glucose levels before exercise

A diabetic should also make sure that there are some carbs on hand during exercise. Drinking enough fluids before, during and post-exercise is important. Diabetics also need to exercise good

foot care, checking the feet carefully after exercise, especially if there is damage to the nerves in the feet, or peripheral neuropathy.