What is Diabetes?

When digesting a meal containing carbohydrates the body’s blood glucose levels will increase as it breaks down the carbohydrates. The body responds by releasing insulin from cells in the pancreas which signal cells to uptake and lower blood glucose levels. Diabetes can be divided into two categories: type I and type II.

**Type 1:** Develops typically in adolescence. The body’s immune system attacks pancreatic cells that produce insulin, eventually eliminating insulin production and therefore cells can’t absorb glucose (which is needed for energy production).

**Type 2:** Develops in adults typically. The body is unable to use the insulin that is released (insulin insensitivity) or doesn’t make enough insulin. This decreased response prevents cells from absorbing the glucose they need for energy making processes. Over time, this proves detrimental for organs.

Why Has It Become a Concern?

Diabetes currently costs the Canadian healthcare system approximately $12 billion and is continuously increasing. This rising economic burden threatens the sustainability of our healthcare system. In the past decade the prevalence of diabetes has doubled and, in the next decade, one in three people will be living with diabetes or pre-diabetes (that equals 4.2 million people!). Over 60% of Canadians are overweight or obese and these factors increase the chances of developing diabetes, and 90% of people living with diabetes have type 2.
How Can I Prevent It?

**DIET AND EXERCISE** - Over 50% of type 2 diabetes cases could be prevented or delayed by healthy eating and consistent exercise. Exercise doesn’t mean hours of rigorous activity; a study showed that 30 minutes of brisk walking a day reduced the risk of developing type 2 diabetes by 30%. Diet is easy: choose whole-grain foods over processed, limit sugary drinks such as pop or juice, eat more polyunsaturated fats and less trans fats.

**FAMILY EDUCATION** - The fast-paced modern family has put healthy eating and exercise on the back-burner. The increase in childhood diabetes is proof of that. As a family we should focus on developing healthy habits in order to prevent our children from developing type 2 diabetes. Make an effort to prepare healthy snacks for your children and plan family activities.

**GLYCEMIC INDEX** - The glycemic index (GI) is a scale that describes the rate at which certain carbohydrates (eg. bread, rice) break down into glucose. The higher on the scale the faster it breaks down. Low GI foods are recommended because they break down more slowly, blood glucose levels don’t spike as much. Eating low GI foods are linked to a lesser risk of developing diabetes. Check out the GI site ([http://www.glycemicindex.com/](http://www.glycemicindex.com/)) and get an idea of what types of food are good or bad.

**PUT DOWN THE REMOTE** - Every two hours spent watching TV instead of being physically active increases the chance of developing diabetes by 20%. Make an effort to limit screen time of both your children and your own.

**MAKE A CHANGE TODAY!** - The resources available are endless. If you’re struggling to find the right diet plan for yourself or your family the HPC has dieticians that would love to get you on the right track. If an injury is preventing you from being active, consult one of our physiotherapists today and start moving towards a healthier you!
The Health and Performance Centre is a proud partner of the in motion initiative. The goal of in motion is to increase the level of regular physical activity among adults and children in the City of Guelph and the Wellington-Dufferin region.

The Health and Performance Centre is working with other community partners to create a “culture of physical activity” in our community.

Did you find this newsletter interesting and helpful?

Do you have more questions on how to make healthy changes to your lifestyle?

Come see a Registered Dietitian at the HPC. Learn how much you need to eat, how to optimize your metabolism, prevent cravings, and increase your energy levels!

Is Pain holding you back? Talk to one of our physiotherapists, chiropractors or massage therapists!

For information on our programs, check out our website www.uoguelph.ca/hpc and click on the "Fitness and Nutrition" tab, or call a friendly receptionist at the HPC at 519-767-5011.


http://www.hsph.harvard.edu/nutritionsource/preventing-diabetes-full-story/