Glycemic Index: the new buzz word, but what is it really?

What is glycemic index?

Glycemic Index (or GI for short) was developed by researchers as a measure of how much a carbohydrate-containing food is likely to raise your blood sugar. Carbohydrates are found in foods such as bread, pasta, rice, fruits, vegetables, milk and products containing milk (e.g. yogurt, ice cream), legumes (e.g. dried peas, beans and lentils), sugars and sweets.

A food’s glycemic index is based on a comparison with a reference food, usually glucose. Glucose is a sugar which raises the blood sugar quickly – it is given a rating of 100%.

For example: spaghetti has a glycemic index of 41. In other words, spaghetti raises blood sugar levels by less than half of what an equal amount of glucose does.

Foods can be divided into high, medium and low glycemic index. A food with a high glycemic index will raise blood sugar more than a food with a low glycemic index. For more information, see The Glycemic Index fact sheet by the Canadian Diabetes Association ([http://www.diabetes.ca/files/Diabetes_GL_FINAL2_CPG03.pdf](http://www.diabetes.ca/files/Diabetes_GL_FINAL2_CPG03.pdf))

Is there any scientific proof behind the glycemic index?

Studies have found that low glycemic index foods have many health benefits, including:

- prevention of type 2 diabetes
- control of blood sugar
- control of blood cholesterol levels

Use of the glycemic index is recommended in meal planning for people with diabetes and those at high risk of developing type 2 diabetes. Further studies are needed before recommendations about the use of glycemic index of foods for the general healthy population can be made.

Will I lose weight if I eat foods that have a low glycemic index?

The term GI appears in many of the latest diet books including: South Beach, Goods Carbs, Bad Carbs and the Glucose Revolution. There are some studies which have found that including low GI foods in the diet, rather than those with a high GI, may result in short term weight loss. However, there have been no studies to date that have looked at whether or not low GI foods can lead to long term weight loss. Therefore, more research is needed before it is known if low glycemic index foods can help with long term weight control.

Which foods have a high glycemic index?

Most foods that have a high GI are found in the “starchy” or grain products food group. These foods include bread, cereal, pasta, rice and potatoes. However, there are many low GI choices from within these groups including some types of bread (e.g. pumpernickel, 100% stone ground
whole wheat breads), cereal (e.g. oatmeal, all bran, bran buds), rice (e.g. converted or parboiled) and potatoes (e.g. sweet).

Most fruits and vegetables and milk products have a low glycemic index. Legumes such as chick peas, beans and lentils also have a low glycemic index and are an excellent source of fibre.

Foods that are high in protein (e.g. meat, fish, poultry, cheese) and fat (e.g. butter, oil, margarine, cookies, pastries) may not raise your blood sugar very much, but they still contain calories. Eating too much of these foods can affect your weight. Also, eating too much fat can have a negative effect on your health by increasing your blood cholesterol. **Moderation is the key!**

**If I’m trying to control my blood sugar, do I have to eat only low glycemic index foods?**

It is not necessary to completely give up all foods that have a high glycemic index. Here are some tips you can follow to lower the glycemic index of your diet:

- Select one low glycemic index food per meal
- Base two meals per day on low glycemic index food choices
- Include legumes (chick peas, beans and lentils) in your meals and recipes
- Because most fruits and vegetables and milk products have a low glycemic index, enjoy a variety of foods from these groups everyday, with an emphasis on low fat choices.
- **Remember…you can get too much of a good thing.** So, watch your portion sizes, even when choosing foods with a low glycemic index.
- Some low glycemic index foods (e.g. chocolate) are mostly fat and sugar and so add little to the nutritional value of your diet. Make choices based on overall nutrition and health value, not just on glycemic index.

**Where can I get more information about glycemic index?**

A registered dietitian can help you select low glycemic index foods more often. You can find a dietitian in your area at [http://www.dietitians.ca/find/i4.htm](http://www.dietitians.ca/find/i4.htm)

*The Glucose Revolution* by: Brand-Miller, Wolever, Colaguiri and Foster-Powell is a book that has reliable information about the glycemic index.

Resource for health professional

For more information about low, medium and high GI choices see the GI tool developed by the Canadian Diabetes Association at [http://www.diabetes.ca/Section_Professionals/ng_glycemic.asp](http://www.diabetes.ca/Section_Professionals/ng_glycemic.asp)

*This FAQ was created for the Canadian Health Network by Maria Kalergis, PhD, RD, CDE and reviewed by Kathryn Arcudi, P.Dt, CDE and Sharon Zeiler, MA, RD.*