

How should we make quality choices of carbohydrates?



Often times as consumers, we let our **buying habits dictate the things we purchase**. Like the instances where you find yourself in the grocery aisle contemplating over which brand of cornflakes you should buy – and the brand with the better TV advertisement would end up being the best choice of cornflakes, to you. Making **quality choices of carbohydrate goes beyond the product's brand name**. One has to look out for the product's **Glycemic index**.

So, what is a Glycemic index? The **Glycemic index (GI) was initially calculated for diabetic patients to aid in keeping their blood sugar levels under control**. Though not all of us are diabetic, the GI remains to be a **useful tool** when making food choices and staying healthy.

As explored in our prior Carbohydrate series, Glucose is the primary source of energy required by every cell in the body. The **GI ranks carbohydrate foods from 0 to 100 based on the rate at which they are**

broken down into glucose. In other words, their Glycemic index indicates the **effects of carbohydrate-rich foods and fluid on our blood glucose and insulin levels.** Thus, foods are classified as having either a **high, moderate or low glycemic index.** Foods that contain a GI of **55 or less is considered a Low GI** Carbohydrates whereas foods with a **GI of 70 or more is considered a High GI** Carbohydrates.

High GI foods are those which are **quickly digested, absorbed, metabolized and result in notable fluctuations in blood sugar (glucose) levels.** Prolonged consumption of High GI foods will lead to **insulin resistance**, resulting in glucose not being effectively cleared from the blood after eating. The loose glucose and insulin in the bloodstream is a **major cause of inflammation.**

In a recent Harvard study, researchers concluded that high-GI carbohydrate foods increase heart disease risk by **intensifying the pro-inflammatory process**, in this case, insulin resistance. Consuming big quantities of rapidly digested and absorbed high-GI carbohydrates also **increases the risk of other heart diseases**, particularly in overweight women who are already prone to insulin resistance.

Moderate and Low GI carbohydrates – the ones that produce smaller fluctuations in your blood glucose and insulin levels – is one of the **secrets to long-term health, reducing your risk of Type 2 diabetes and heart diseases.** Low glycemic index foods take a longer time to enter the bloodstream and may be preferred for endurance exercise to promote **sustained carbohydrate availability.** They provide you with energy for a much longer period and **stave off hunger and cravings**, making them one of the keys to maintaining an ideal body weight. Low GI foods also help in decreasing the need of the body for insulin, thus **keeping blood sugar levels in check.**

The Glycemic Index (GI) categorizes carbohydrate foods by how they affect your blood glucose levels. Using the Glycemic index, we can make better food choices. So the next time you find yourself in a supermarket aisle, try looking at a product's GI, it should be labelled on the packaging. If it is not listed, try referring to the table below and avoid foods that contain High GI ingredients.

Tables of Glycemic Index Values

Low GI (Choose most often)	Medium GI (Choose more often)	High GI (Choose less often)
Breads		
100% stone ground whole wheat	Whole wheat	White bread
Heavy mixed grains	Rye	Kaiser roll
Pumpernickel	Pita	Bagel, white
Cereal		
All Bran™	Grapenuts™	Bran flakes
Bran Buds with Psyllium™	Puffed wheat	Corn flakes
Oat Bran™	Oatmeal	Rice Krispies™
	Quick Oats	
Grains		
Barley	Basmati rice	Short-grain rice
Bulgar	Brown rice	
Pasta/noodles	Couscous	
Parboiled or converted rice		
Others		
Sweet potato	Potato	Potato, baking (Russet)

Yam	Sweet corn	French fries
Legumes	Popcorn	Pretzels
Lentils	Stoned Wheat Thins™	Rice cakes
Chickpeas	Ryvita™ (rye crisps)	Soda crackers
Kidney beans	Black bean soup	
Split peas	Green pea soup	
Soy beans		
Baked beans		

Source: Canadian Diabetes Association, 2012.

You may also be interested in [Carbohydrate introduction](#), [Why we need Carbohydrates](#) and [What's your Carb Type](#)

References

Asif, H. M., Akram, M., Saeed, T., Khan, M. I., Akhtar, N., Rehman, R. U., Shah, S. M. A., Ahmed, K. & Shaheen, G. (2011). Carbohydrates. International Research Journal of Biochemistry and Bioinformatics, 1(1), 001-5.

Bonci, L. (2009). Sport Nutrition for Coaches. Human Kinetics, 11-17.

Brown, A. (2007). Understanding Food: Principles and Preparation. Cengage Learning, 31-5.

Canadian Diabetes Association. (2012). Paving Your Path to Diabetes Management: Basic Carbohydrate Counting and Glycemic Index. Retrieved from <http://www.diabetesgps.ca/en/paving-your-path/choosing-the-right-types-of-carbohydrates>

Englyst, K. N., Liu, S. & Englyst, H. N. (2007). Nutritional characterization and measurement of dietary carbohydrates. *European Journal of Clinical Nutrition*, 61(1), S19-39. <https://doi.org/10.1038/sj.ejcn.1602937>

Stanfield, P. S. (2010). *Nutrition and Diet Therapy: Self-Instructional Approaches*. Jones & Bartlett Publishers, 47-52.