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GLYCEMIC INDEX AND WEIGHT CONTROL

It is likely that you have heard of the glycemic index and wondered what it is and whether it is useful for losing unwanted body fat?

The glycemic index is a measurement of the effect that food has on your blood sugar level and your insulin response to foods. Foods which have a high amount of sugar in them (such as maple syrup, honey, or candy) or are "starchy" (like carrots, potatoes, or rice cakes) are rated *high* on the glycemic index because you experience a rapid rise in your blood sugar level when you eat these foods. Other foods (especially foods high in fibre such as, whole-grain rye bread and All-Bran cereal) are rated *low* on the glycemic index because they do not produce a rapid rise in blood sugar after eating them.

Blood sugar or glucose

What is blood sugar level and why is it important? An elevated level of blood sugar can "numb" you and make you feel sleepy. When your blood sugar (glucose) goes up, your body responds by making insulin to remove glucose from your blood and move it into the cells to be metabolized. As the blood sugar drops to near normal, your body responds by making a product that releases stored glucose from your liver to prevent your blood glucose from dropping so low that you feel weak (hypoglycemia) or you could potentially pass out.

Blood sugar can go up very little or a lot, depending on the type of carbohydrate eaten. Typically meals consist of several carbohydrates (e.g., milk, bread, fruit, vegetables, desserts or sweets) which can cause either a varied (different from individual to individual) or accumulative (all the carbohydrates acting together) increase in blood sugar or blood glucose.

Carbohydrates

All carbohydrates are made up of sugars. The body breaks down carbohydrates into simple sugars (glucose, fructose or galactose) for the body to use, no matter whether the source of the carbohydrate is refined grains (such as white rice or white bread) or complex carbohydrates (like starches, whole grains, fruits, or vegetables). The end product of this breakdown is always the same - glucose. The difference between the two is that the carbohydrate contained in starches (like breads) is 100% available for conversion into glucose, whereas other sources of carbohydrate (like fruits) are only 50% available. Therefore, some carbohydrates have a higher "glycemic" effect on raising blood sugar than others.

Calories and carbohydrates

Some "diet" plans are built around the principle that carbohydrates with a high glycemic index should be avoided. While this avoidance may make sense for a person who has uncontrolled diabetes or has diabetes requires insulin injections, avoidance doesn't make sense for the person with adequate insulin who just wants to lose weight. Avoidance of foods with a high glycemic index not only cuts out foods with valuable vitamins and minerals, it does not necessarily promote weight loss, either.