THE CARBOHYDRATE CONTINUUM

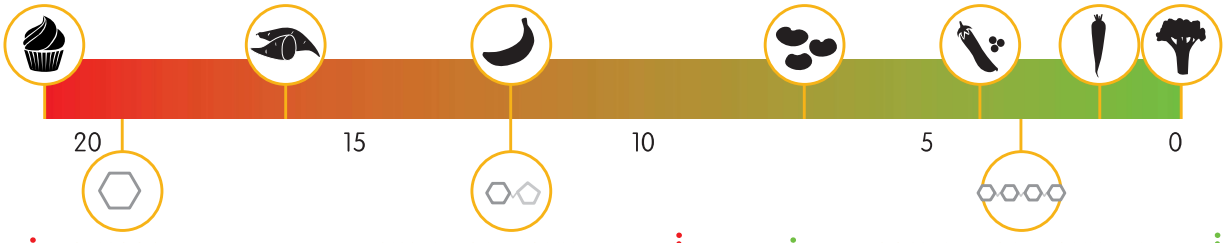
THE GOOD, THE BAD, THE UGLY

UNDERSTANDING THE CONTINUUM

Every carbohydrate you eat—every piece of bread, pasta, bagel, cake, cookie, muffin, fruit, vegetable, bean or grain—ends up as glucose in the blood.

BLOOD SUGAR = GLUCOSE IN THE BLOOD

Glucose is the most basic form of sugar. Glucose is required by all cells in the body for energy. Your brain needs it. Your red blood cells need it. Glucose is the only form in which sugar can be transported directly into you bloodstream. All other form or chain of sugars, otherwise known as carbohydrates, need to be broken down by your digestive system to be converted to the glucose that feeds your cells.



SIMPLE CARBOHYDRATES

Simple carbohydrates have fewer sugar molecules bound. These are your white foods--your refined foods. Simple carbohydrates are digested quickly, meaning they move into the bloodstream quite rapidly. Refined sugars are simple carbohydrates. Yet whole foods like raisins, potatoes and juices can be simple carbohydrates too.



COMPLEX CARBOHYDRATES

Complex carbohydrates have many sugars bound and branching strands. The many branches slow the digestion of the sugars. Complex carbs are usually packed with fiber, vitamins, and minerals that accompany the chains of sugars. Examples are green vegetables, whole grains and legumes.



WHAT'S IN IT FOR ME?

This is where we get to the good, the bad, and the ugly. Blood sugar swings don't just affect those with diabetes. They affect all of us. Blood sugar swings affect our hormones, our weight, our moods and leave us more susceptible to chronic diseases like heart disease and cancer, and autoimmune conditions like psoriasis, Hashimoto's and more.

functional nutrition alliance

WHAT'S "GLYCEMIC"?

Glycemic literally means "causing sugar in the blood".

GLYCEMIC LOAD



The glycemic index and glycemic load were developed to speak to this issue of carbohydrate digestion and how quickly foods break down into sugar (or glucose) in the body. These models explain how simple or complex the branches of sugars are.

We prefer to utilize the model presented by the glycemic load vs. the glycemic index. The load considers the total amount of rapidly absorbable carbohydrates—the starch or the sugar in the food—as well as the glycemic index. If you isolate the sugars in a carrot, as the glycemic index does, they are quite high. But if you consider the rate at which those sugars are absorbed, due to all the fiber in the carrot (chew, chew, chew), as the glycemic load does, the absorption of the sugars is quite low, or slow.

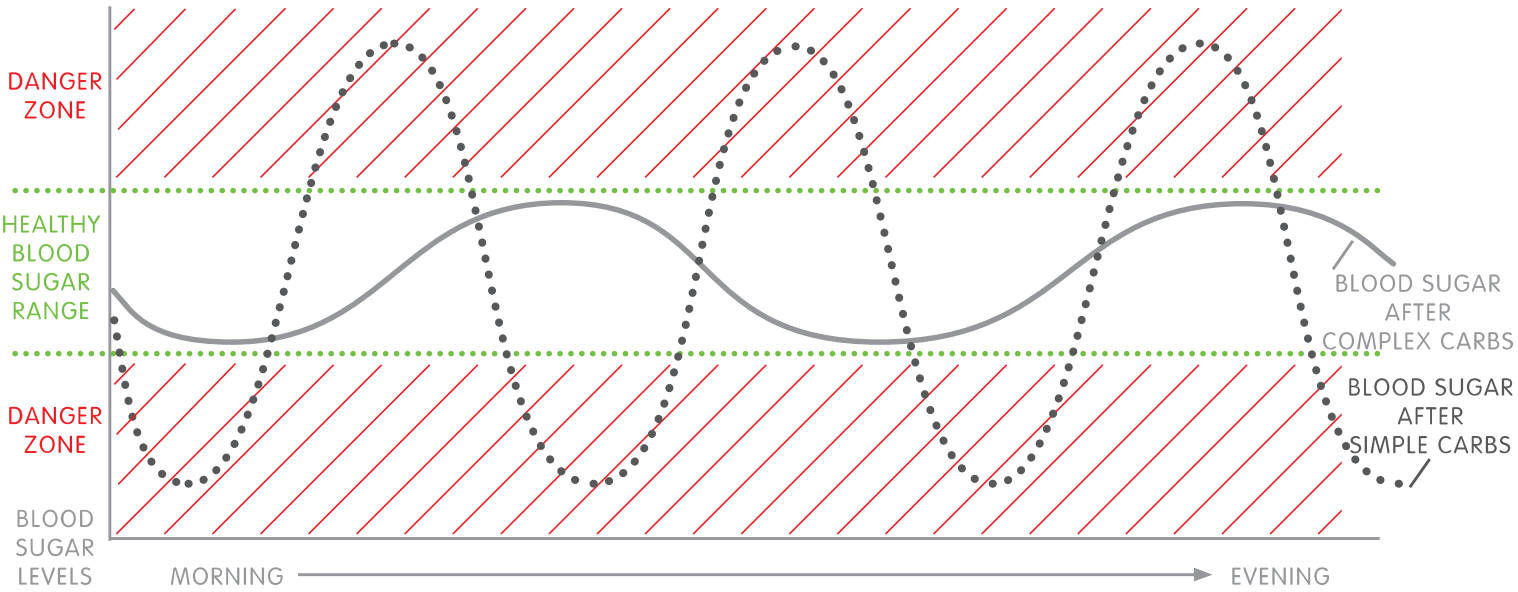
This is what we want. Slow absorption of sugar for more sustained energy, weight management and overall health.

LOW GLYCEMIC PERKS

- *high in fiber*
- *help you stay full longer (and avoid overeating)*
- *provide sustained energy*
- *lower cholesterol levels*
- *help to sweep toxins from the body*
- *stabilize blood sugar levels and insulin production*
- *high in vitamins, minerals, enzymes, & phytonutrients*
- *help prevent chronic disease*
- *help you feel full without a lot of calories*
- *naturally stimulate metabolism and promote fat loss*

BE THE BOSS OF YOUR BLOOD SUGAR

When you eat carbohydrates, food made of sugars and starches, your blood sugar rises and releases the hormone, insulin. Insulin helps your cells draw sugar from your bloodstream to use as fuel. Your blood sugar then goes down again, sometimes too low. When you eat more complex carbs, your blood sugar can stay in the green zone to fuel you through your busy day. Simple carbs lead to blood sugar swings that affect our hormones, weight, moods and leave us more susceptible to chronic diseases like heart disease and cancer, immune challenges and fatigue.



CHOOSE LOW, FEEL HIGH!

Glycemic literally means "causing sugar in the blood." By choosing low glycemic foods you stay in the "green zone," control your swings, and have a stronger hand in reclaiming your health. Use this short list of whole foods to help you start making choices in the "green zone."

HIGH GLYCEMIC LOAD (ABOVE 20)

Instant oatmeal	30
Raisins	28
Baked potato (white)	26
White rice	26
Bagel (white)	23
Macaroni	23
French Fries	22
Spaghetti (white)	22
Cornflakes	21
Rice noodles	20

MEDIUM GLYCEMIC LOAD (11-20)

Brown rice	18
Dates (dried)	18
Sweet potato	17
Corn (on the cob)	15
Oatmeal	13
Quinoa	13
Banana (yellow, flecked with brown spots)	12
Navy Beans	12
Orange juice	12
Whole grain bread	11

LOW GLYCEMIC LOAD (1-10)

Honey	10
Black beans	7
Blueberries	6
Lentils	5
Pears	4
Carrots	3
Cashews	3
Eggs	2
Broccoli	1
Almonds	0

see other page for more help understanding the carbohydrate continuum