

FITNESS RESULTS CHALLENGE

5 WEEKS OF NUTRITION

WEEK THREE

BLOOD SUGAR REGULATION

What's the big deal about sugar?
Learn how your body responds to excess sugar and refined carbs, and learn how to get off the sugar rollercoaster.

YOU'LL LEARN:

- Week 1: How to prepare for your real food sugar detox
- Week 2: Learn the basics of digestion
- Week 3: What sugar really does in your body**
- Week 4: Learn about healthy fats
- Week 5: Tips to move forward!



Hygge Wellness

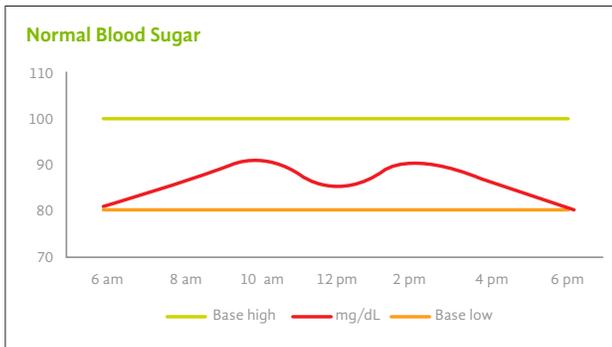
HOLISTIC NUTRITION

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Blood Sugar Regulation

Having a proper balance of blood sugar levels is one of the body's top priorities. The body will do whatever is necessary to get blood sugar back in balance.

Normal Blood Sugar - How it Works!



- When we wake, or after not eating for several hours, our blood sugar levels should be at the lower range of “normal,” around 80 mg/dL.
- When we eat a meal of balanced, healthy protein, fats and carbohydrates, the nutrients from those foods get converted into energy. Our blood sugar naturally rises to the upper normal level, about 100mg/dL or even a little higher, depending on the meal.
- When blood sugar reaches the upper limit, the pancreas gets the message to secrete the hormone INSULIN. Insulin’s job is to take excess sugar out of the blood and store it in the liver and muscles for later use.
- After a few hours, when the blood sugar level begins to get low (but still in the healthy range), the pancreas secretes a different hormone called GLUCAGON that takes that stored sugar out of storage and puts it back into the blood for use as energy until the next meal.

That’s it, folks. That’s how healthy blood sugar balance stays healthy.

Never before in the history of mankind has there been an emergency need to lower blood sugar levels!

Dysregulation -

What happens when your body receives too much sugar!

SUGAR HIGH

When we eat a meal full of sugar (i.e., lots of carbs and/or processed, refined foods), blood sugar shoots past the normal upper level, causing the pancreas to release more and more insulin. Think “sugar high.”

- Our bodies are designed to only store a small amount of sugar in the liver and muscles. If there is excess, it will eventually be stored as body fat.
- When this happens repeatedly, we get fatter.

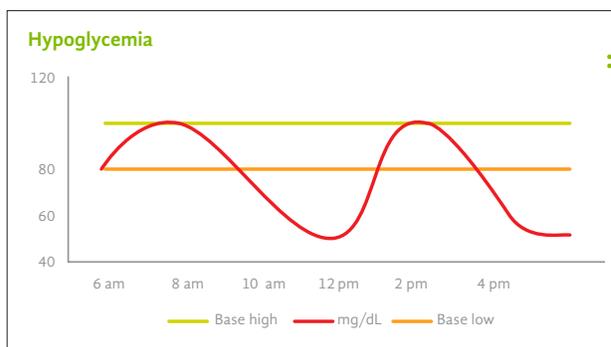
SUGAR CRASH

Because of all the excess insulin floating around, the blood sugar levels plummet below the normal range. Alas, glucagon cannot revert all of this stored sugar back into the blood stream. Think “sugar crash.” When the sugar levels get too low, we either need to:

- Eat more sugar to get us out of this very low energy state, OR
- Bring in the adrenal glands to release the hormone CORTISOL to raise the levels of blood sugar. Cortisol is known as the STRESS hormone. When we are stressed repeatedly (think of our modern lifestyle: too little sleep, constant “go” mode yet sedentary, not enough exercise, no down time, too much sugar, processed foods, chemical overloads, constant informational input...) there is enormous strain on us. Eventually that excess cortisol increases insulin levels and adds to weight gain, especially around the mid-section of the body. Cortisol is the STRESS hormone. It is also known as the FAT STORAGE hormone.

The Stages of Dysglycemia

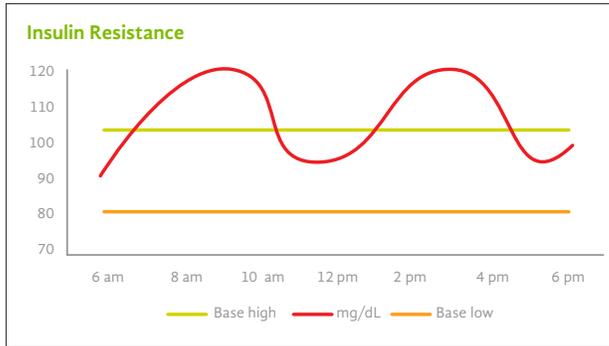
Described below are the stages of Dysglycemia: “Abnormal blood glucose levels from any cause that contribute to disease.” To be clear, if people ate a healthy balance of proteins, fats and carbohydrates, the following scenarios would be much less likely to occur.



Stage 1: Hypoglycemia

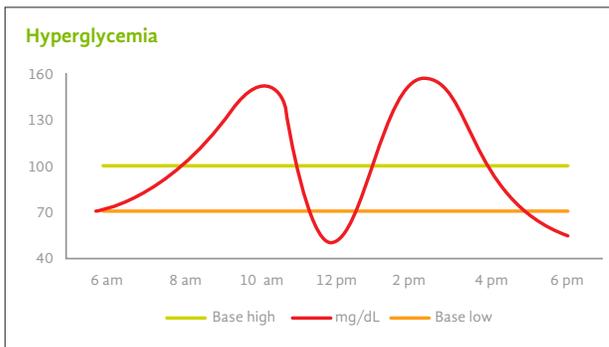
Below 80 mg/dL. This is when the blood sugar dips below normal levels. You’ve probably experienced this at some point in your life but hopefully not often. It’s that feeling of serious “brain fog,” total lethargy, irritability, etc. This is the sugar “crash” that happens about 20 minutes to an hour after the initial sugar “high.” Eventually, with all that insulin rushing around trying to bring the blood sugar into balance, the cells of the body don’t/can’t accept it anymore. This is known as...

The Stages of Dysglycemia (Cont.)



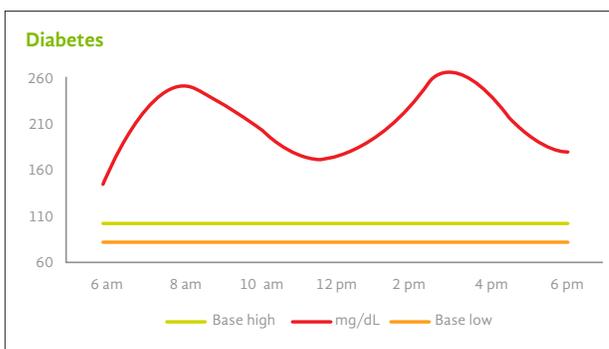
Stage 2: Insulin Resistance

Usually around 100 mg/dL (between 90 - 120 mg/dL). Millions of people are walking around with insulin resistance and don't even know it! The constant barrage of sugar and refined carbs is causing too much insulin to be produced. If this remains unchecked, it becomes...



Stage 3: Hyperglycemia

Above 100 mg/dL. Averages between 150 - 200 mg/dL. Consistently elevated blood glucose levels result due to inability of cells to properly use insulin (due to insulin resistance).



Stage 4: Type 2 Diabetes

Above 200 mg/dL. This basically means that insulin has become completely ineffective and literally cannot do its job.

The Many Names for SUGAR

Food manufacturers are not required to notify you on the package when a product contains an artificial sweetener. They are also not required to note that “SUGAR” is an ingredient if it is listed as a specific kind of sugar (like sucrose or dextrose instead of just “sugar”). This is why there are SO MANY different names for it!

5x5 Rule

When choosing a food with a label

Strive for 5 grams of sugar or less per serving

Strive for 5 ingredient or less

Here is a partial list of sugar’s many names and identities. Please note that it is impossible to list the myriad names for sugar in its various forms. New sugars (real and artificial) are being “discovered” and “invented” all the time.

When in doubt, do your research!

Sugar, Sugar, Everywhere!

Agave Nectar	Fructose	Maltodextrin	Stevia	Artificial Sweeteners:
Barley malt	Fruit juice concentrate	Maltose Mannitol	Sucrose	
Beet sugar	Glucose	Maple sugar	Sugar	Acesulfame-K
Brown sugar	Glucose Syrup	Maple syrup	Turbinado sugar	Alitame
Cane sugar/ juice	Golden syrup	Molasses	White sugar	Aspartame
Caramel	Glycerol	Polydextrose	Xylitol	Cyclamates
Corn sugar	High Fructose Corn Syrup (HFCS)	Polysaccharides	Sugar is also labeled as	Neohesperdine
Corn syrup	Honey	Powdered sugar	“ ___ malt,”	Neotame
Crystalline	Lacititol	Rice extract	“ ___ juice”	Rebiana
Fructose	Lactose	Neotame	“ ___ syrup”	Saccharin
Date	Malt	Saccharin	Or any word ending in “—ose” (like “lactose, or sucrose) or “—tol” (like sorbitol or xylitol)	Sucralose
Dextrose	Malt extract	Sorbitol		Thaumatococcus
Disaccharides		Sorghum		
D-Tagatose		syrup		
Erythritol				



***PRACTICE MAKES PROGRESS,
NOT PERFECT***



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