

SUGAR HEALTH AND THE GLYCEMIC INDEX

Elson Haas, MD

AS I MENTIONED IN MY TEN TIPS ON WISE SUGAR USE IN THE MAY 2017 ISSUE OF TOTALHEALTH, THE USE, OVERUSE AND ABUSE OF SUGAR IN THE TYPICAL American diet and lifestyle are increasingly known to be significant factors in creating poor health and chronic disease, especially among young people. Sugar is the number one reward system in the world. I wanted to address this important topic in more detail in this article.

Clearly, the high consumption of refined sugar and refined flour products are the greatest factors in overweight and obesity. This includes breads and baked goods, candies, and sodas. Both refined cane sugar and more recently, high-fructose corn syrup, constitute an excess of non-nutrient calories, which rarely satisfy hunger or the body's need for nutrition. As a result, we still need and crave food. However, if we are focused only on eating the quick, readily available foods typically around us, we'll keep getting too many calories with too little real nutrient value and we'll gain weight. Many of us tend to eat or overeat this way at stressful or transitional times, particularly in adolescence or in mid-life. When we add to our fat cells and the areas around our belly and hips, this is more "dangerous" weight gain and more difficult to lose. The key is to prevent added weight by replacing highly sweet and starchy foods with lower calorie and high nutrient foods we enjoy that won't cause weight gain.

It's a good idea to start by evaluating our sugar intake and our connection to, or need for, added sugars in our diet. Here, I don't mean fresh fruits, but foods that are made with added sugar, such as candy, sodas, breakfast cereals, cookies and other baked or processed/package goods. Even foods that don't taste sweet, like savory sauces and dressings, often have hidden sugars in them. So watch out and remember to check the labels of the foods you buy for their sugar and high fructose corn syrup content. Try replacing them with healthier or more wholesome choices.

TOO MUCH SUGAR IN OUR FOOD, and TOO MUCH LOBBYING MONEY AS WELL

Not only do we need to pay attention to what food we buy and consume, but also what nutrition information we ingest and digest. The sugar industry has much invested in promoting and selling their products. The political lobbying to keep sugar popular (and not subject to additional taxes like alcohol or tobacco) has been going on for many decades and highlights the conspiracy to promote sugar as "safe"

and blame fats for many diseases. The truth is now coming to light and the great "Sugar Cover-up" is in the news.

It's not just advertising that's deceptive; multinational food corporations also fund and promote questionable scientific research through such organizations as the International Life Sciences Institute, a group based in Washington, D.C. and funded by giant food and agrochemical companies including Coca-Cola, General Mills, Hershey's, Kellogg's, Kraft Foods and Monsanto.

These are not isolated incidents. They echo other news of sugar industry shenanigans going back decades, which successfully shifted the focus away from sugar and onto dietary fats as disease causing agents. For many years nutritional guidelines were adversely affected by these shady practices. Remember that part of Staying Healthy is becoming a well-informed consumer.

The news isn't all bad, however and there are signs that we are making progress with the whole issue of sugar in our Standard American Diet (SAD). For example, in the November 2016 election a number of cities in California passed a soda tax putting sugar drinks in the same category as alcohol and tobacco, which is where they really belong given their addictive and disease-causing potential. Also, more recently, the nation's largest drugstore chain, CVS, announced that it will be reducing space devoted to junk food and allocate more space to nutritious food and health products. CVS executives said that they would implement the new format at several hundred stores by the end of 2018, demonstrating the company's commitment to remake itself as a beacon of healthy living rather than a place devoted primarily to treating illnesses and selling candy bars. We hope that other cities and corporations follow these leads.

USING THE GLYCEMIC INDEX

Many consumers are already aware of the role that excess calories and carbohydrates can play in weight gain and poor health, and they read food labels to try and monitor what they eat. This is common sense, but rather than just describing foods as simple and complex carbohydrates, they can also be rated on the Glycemic Index. This is a very useful tool in understanding sugar in our diet. Extremely sweet or very starchy foods are high on the Index, meaning they break down and are absorbed quickly and cause the release of extra insulin, burdening our metabolism. Foods low on the Index are metabolized more slowly and provide a steadier stream





of glucose and other nutrients. As a result, they take less work and stress for the body to handle.

(See the Glycemic Index chart at the end of this article)

Magnesium And Chromium Can Help Keep Sugars In Balance

Research indicates that magnesium intake also has a “modest but significant effect” on keeping blood sugar steady and stabilizing insulin metabolism; in other words magnesium deficiency can weaken sugar metabolism. Magnesium is found in whole grains and nuts and seeds, as well as leafy green vegetables. People can also supplement with capsules of 125–250 mgs 1–2x daily. (Note: The common magnesium citrate can cause loose bowels, and many consumers use magnesium supplementation for constipation. Magnesium glycinate has a lesser affect on the bowels.)

Studies have also shown that the majority of people eating typical Western diets consume less than the suggested daily dietary intake of chromium, which is set at 50–200 micrograms per day. Insufficient chromium intake is associated with signs and symptoms similar to those seen in diabetes and cardiovascular diseases. People with sugar issues or pre-diabetes often supplement with 200 micrograms of chromium (commonly picolinate) twice daily.

DIETARY GUIDELINES

In summary, the dietary guidelines for lowering sugar intake include consuming a low glycemic diet, consisting mainly of proteins and vegetables, with a focus on leafy green veggies, as well as nuts and seeds, whole grains with legumes, berries and some stone fruits. This way of eating also means lowering the intake of highly starchy foods, such as potatoes, carrots, beets and intensely sweet fruits like melons and bananas, limiting juice intake as well.

Some More Diet Tips Include:

- If you were raised on meat and potatoes (and desserts), or if you feel that a meal without bread isn't a meal, there are some favorite starches that are still relatively low on the Glycemic Index (see chart). Filling foods that are in the optimal range of 55 or below on the Index include:
- Healthy Starches—brown rice and wild rice, whole wheat pita bread, sweet potatoes and yams, oatmeal, popcorn, seeds, nuts, and nut butters, as well as most peas and beans including black beans, pintos, limas and kidney beans
- Healthy Fruits—berries, mangos, kiwis, pears and apples, stone fruits such as peaches, plums, apricots and cherries, as well as citrus such as grapefruit and oranges.



Elson Haas, MD is a practicing integrative family physician since 1973 and is founder/director of the Preventive Medical Center of Marin (pmmcmarin.com) in San Rafael, CA. Dr. Haas is the author of 11 books on health, nutrition, and detoxification, including *Staying Healthy with Nutrition*, *The Detox Diet*, *The False Fat Diet*, and the classic, *Staying Healthy with the Seasons*. His most recent books are *Ultimate Immunity* (Rodale 2015) and the just self published *Staying Healthy with NEW Medicine: Integrating Natural, Eastern, and Western Approaches for Optimal Health*. Learn more at ElsonHaasMD.com. Dr. Haas, as Dr. Sun, creates entertaining educational products for children and families, including The Anatomix Comix™ with CD of songs and also available as Apps at www.seasonsstudios.com.

THE GLYCEMIC INDEX

Eating Low on the Index Makes Everything a Little Easier

- Any food below 55 tends to conserve insulin and hormones.
- It's the blast of insulin from foods high on the Index that drives hunger cravings.

- With a diet of whole foods, appetite seems to drop quite naturally.

Note: this is a basic list to get you started. It is from my book, *The Detox Diet*, which has a whole chapter on *Sugar Detox*. You can also search online for more complete data. ■

Basic List of The Glycemic Index							
Grains, Breads, Cereals		Vegetables		Fruits & Dairy Products		Sweeteners	
White bread	95	Baked potato	95	Watermelon	70	Maltose	105 to 150
Instant rice	90	Parsnips	95	Raisins	65 to 95	Glucose	100
Rice cakes	80	Carrots	85	Pineapple	65	Honey	75
Pretzels	80	French fries	80	Ice cream, premium	60	Refined sugar	75
Corn flakes	75	Sweet Corn	75	Ripe bananas	60		
White flour	75	Beets	70	Mango, kiwi, grapes	50		
Graham crackers	75	Sweet potatoes	55	Blueberries	50		
Regular crackers	75	Yams	50	Pears	45		
White bagel	75	Pinto beans	40	Apples, oranges	40		
Cheerios	75	Lima beans	40	Peaches, plums	40		
Puffed wheat	75	Butter beans	30	Yogurt, with fruit	35		
White rice	70	Black beans	30	Raspberries	32		
Taco shells	70	Kidney beans	30	Milk, whole	30+		
Spaghetti	60	Artichoke	25	Milk, skimmed	30		
Pita bread	55	Asparagus	20	Dried apricots	30 to 70		
Wild rice/brown rice	55	Tomatoes	15	Grapefruit	25		
Oatmeal	55	Green vegetables	15	Cherries	25		
Popcorn	55			Yogurt, plain, no sugar	15		
Green peas	45						
Green beans	45	Nuts	15 to 30				

