

**EVERY TIME YOU EAT
IT'S AN OPPORTUNITY
TO NOURISH
YOUR BODY**

NUTRITION NEWS

Abilene ISD

STUDENT NUTRITION
DEPARTEMENT

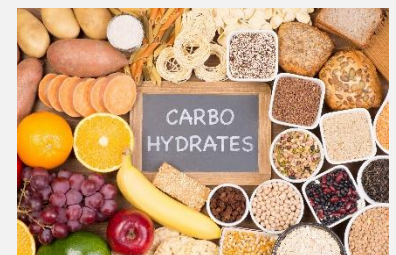
APRIL 2019

IN THIS ISSUE:

Did you know our brain needs a constant energy supply in order to function optimally? It weighs only 2% of our body weight, yet consumes 20% of our daily energy. Our brain is constantly at work and without a steady supply of fuel, it would not be able to fulfill its important functions, like keeping us alive. How does our brain get its energy and fuel, you may ask? Well it's quite simple. What is 4 calories per kilogram, offers energy to the body, is loved by pretty much everybody, yet restricted from the diet by quite a few? That's right, a carbohydrate. It is estimated that when powered by carbs, the brain needs about 110-145 grams of glucose, which comes from the breakdown of carbohydrates, per day in order to do its job properly. Most people meet this glucose requirement and actually consume more than twice the amount our brains use. But then there are those who are afraid of carbs and avoid them at all cost. If ever one has experienced brain fog, it could be because enough carbs are not being consumed, as they do supply energy to the brain as stated before. This is not to say that their brains are not receiving fuel, because our bodies have an awesome backup generator, per se, that prevents such a thing. And though low carb diets do work for some, let's point out that carbohydrates are not the enemy here. The key is simply finding the right carbs, instead of trying to avoid them completely. It is the over-consumed highly processed and refined carbohydrates- cookies, white bread, soft drinks, white rice- that give a bad name to the nutritious, beneficial carbohydrates. There is no doubt that overconsumption of processed carbs have led to the epidemic of health problems we see in our country today, but do not let this be the reason healthy carbs are cut out from the diet.

Food for thought: One 12 oz. can of soda per day = 39 g of sugar
39 g of sugar per can x 365 days in a year = 14,235 g of sugar
14,235 g of sugar = 32 lbs. of sugar in a year

<https://www.dietdoctor.com/low-carb/does-the-brain-need-carbs>



- Intro: Carbs Are Not the Enemy
- Understanding Carbohydrates
- Simple Carbs VS. Complex Carbs



- Exercise and Carbohydrate Intake
- Recipe of the Month
- Inspirational Quote

Understanding Carbohydrates

Carbohydrates are the sugars, starches and fibers found in foods such as fruits, grains, vegetables, and milk products. Just like a car needs gas to run, our bodies need carbs to function. In fact, carbohydrates are our body's favorite source of energy. They manifest themselves in three different categories: monosaccharides, disaccharides, and polysaccharides. Monosaccharides being the most basic form of carbs, also known as simple carbohydrates, consist of fructose, glucose, and galactose. Disaccharides are formed by the joining of two separate sugar molecules (monosaccharides) that consist of lactose, maltose, sucrose and trehalose. For example, lactose is formed by the combination of a glucose molecule with galactose. And last but not least, polysaccharides are chains of monosaccharides linked together in sequences to as few as three sugars, to as many as several thousand. Polysaccharides, also known as complex carbohydrates, consist of cellulose, glycogen and starch. As mentioned at the beginning of this topic, carbs are made up of fiber, starch and sugar. Fiber and starch are the complex carbs and sugar is the simple carb. Being that the recommended RDA for carbohydrates is 45-65% (majority of the diet), it is not so much important 'the amount' of carbs consumed as it is important 'the type' of carbohydrates consumed. Fueling your body with high quality, healthy carbs is important. You may have heard that eating complex carbs is better than eating simple carbs. This is because complex carbohydrates are denser in nutrients and higher in fiber, therefore, they take longer to digest, ultimately leaving you full for a greater length of time. They are also a better choice for type 2 diabetes because they help manage blood sugar levels and prevent spikes after meals. An adequate intake of carbohydrates prevents the body from depleting protein and ultimately sparing muscle tissue. So before marking carbs off the list, realize that they do serve an important purpose and when eaten according to one's energy needs, they can positively contribute to a healthy diet.

SIMPLE CARBS

*Simple carbs are sugars; most are added to foods in the American diet and are used by the body more rapidly and absorbed in the blood stream.

They include:

- Corn syrup & high fructose corn syrup
- Raw sugar
- Brown sugar
- Glucose, fructose, & sucrose
- Fruit juice concentrate

Try avoiding foods that contain simple carbs such as:

Sodas, packaged cookies, breakfast cereal, and baked treats.

vs.

COMPLEX CARBS

*Complex carbs are fiber and starch, which pack more nutrients than simple carbs. The main sources of fiber are:

- Fruits
- Vegetables
- Nuts
- Beans
- Whole grains

Starch also found in some of the same foods, but considered starchier instead of fibrous are:

- Corn
- Potatoes
- Peas
- Cereal
- Rice
- Oats
- Whole wheat bread

Exercise and Carbohydrate Intake

More times than not, carbohydrates get a bad rep. Low carbohydrate intake, such as a ketogenic diet, may work well for some people or is the preferred route, but ultimately they are our primary source of energy. In fact, carbohydrates are the most important macronutrient related to physical activity. They are necessary for the formation of ATP used by the central nervous system, making carbohydrates an absolutely essential part of the diet. Complex carbs are an extremely efficient source of energy that when broken down into more simple sugars, like glucose, can be used to fuel muscle contractions, as well as energy for immediate tasks. Any unused glucose will be stored as glycogen in the liver and muscles of the body for use later on when needed. Not all carbs are equal, and depending on the goal and type of exercise, determines what kind of carbs one may want to consume. Some carbohydrates are used more rapidly than others and those are the ones needed for optimal performance. Simple carbs would be the best to consume before a workout because they are absorbed and digested the fastest and, therefore, can be used by the body for fuel immediately. If we do not have an adequate amount of carbs to form glucose, then muscle will be broken down into amino acids to be converted into glucose so the body can use for energy. Obviously, this isn't ideal since we want to be able to maintain as much muscle as possible, especially if we work so hard for it. It is important to fuel our bodies with adequate carbohydrates when we are active, because exercise depletes our energy stores. Ever heard the phrase "hit a wall?" Athletes refer to this a lot when they suddenly run out of energy and physically cannot push themselves anymore. This happens when we run out of glucose or glycogen and do not replenish properly. See, carbs are not all bad. They serve a significant purpose and when consumed in a healthy manner, according to one's macronutrient needs and activity levels, can help one achieve optimal results and feel energized throughout a workout.

Savory Sweet Potato Fries with Guacamole Dip



Ingredients:

- A couple of medium-sized sweet potatoes
- A couple of avocados
- 2 Tbsp. Olive oil
- Sea Salt
- Garlic Powder
- Black Pepper
- Lime/Lemon
- Baking Sheet
- Foil
- Large bowl

Sweet Potato Directions:

- Pre-heat oven to 450 degrees F
- Prepare baking sheet with foil
- Skin sweet potatoes (optional) or leave on for more fiber and nutrients
- Cut sweet potatoes into ½ inch thick fry-shaped pieces
- Throw into a large bowl with olive oil, salt, pepper and garlic powder to taste
- Toss and shake until evenly seasoned
- Evenly distribute on baking sheet pan so that fries are not overlapping for crispy, better cooked fries
- Place in oven for 20 minutes or until fries are soft and crispy

Guacamole Directions:

- Peel and mash avocados in a medium serving bowl
- Stir in salt, pepper, and garlic powder to taste
- Add lemon/lime juice for taste, as well as preservation if leftover

“Time is non-refundable, live it with intention.”