

A Touch of Life

Health and Wellness Program



Week 4

Carbohydrates

The Energy Institute of the Healing Arts Foundation, Inc
12911 Woodmore Road
Mitchellville, MD 20721
301-249-2445

Carbohydrates are the staples of life and yet society has classified them as a dangerous food that contribute to all types of unhealthy conditions including weight gain, obesity, hypertension, diabetes, cardiovascular disease, etc. There is some truth to this statement; however, the majority of the carbohydrates being consumed are refined starches and processed sugars. It is not the carbohydrates per say that are causing the weight gain and other health conditions, but the refining process that is stripping all of the nutrients from the carbohydrates. The interesting thing is when manufactures process grains and cereals the essences of these foods are lost. Due to the law manufactures have to replace them with synthetic nutrients. The synthetic nutrients are unable to be absorbed in the body, impairing digestion, absorption and elimination, resulting in an accumulation of waste in the small intestine. Because of the health issues posed by refined carbohydrates medical society has issued a low or no carbohydrate campaign that has many people convinced that they should stay away from carbohydrates because of its health risk factors. This is why we are witnessing high protein diets.

Carbohydrates are energy foods that assist in maintaining the body's health and immunity. Carbohydrates are comprised of carbon, hydrogen and oxygen molecules, which are the major elements of the human body; without which the body would disintegrate back into the earth in which it came.

Most carbohydrates are the products of a plants ability to receive photosynthesis from the sun. The sun packs them full of life given nutrients that humans are unable to directly receive from the sun. Humans receive 85 to 90 percent of their carbohydrates from plant life and the remainder from dairy products (which many people have an intolerants to). We find carbohydrates in the forms of grains, sugars, vegetables, fruits, beans, peas and cereals. Eating carbohydrates in their natural unprocessed state the body amyolytic enzymes are able to digest them and use them as fuel. On the other hand, when adulterated (processed) carbohydrates are consumed, they lack the nutritional values and produce empty calories, which stores in the body as fat and increase sweet and sugar craving to maintain our energy levels. Many people who are heavy protein eaters also crave sweets because of the lack of energy they receive from the excessive proteins. These sweets can come in the form of fruits or hidden sugars in meats and other products eaten. The calorie conscious high protein eaters stay within their limits of carbohydrates.

Carbohydrates are "saccharum" the Latin word for sugar. They are classifications by size and water solubility, which governs how well they will work in the body.

Monosacchrides have the smallest molecule chain and are very soluble in water. It is comprised of glucose, fructose, galactose, xylose, mannose and ribose. There are over 100 different types of monosaccharides in nature. As a matter of fact, carbohydrates are the most abundant compound in nature and consumed by every mammal in the universe.

Disaccharides, on the other hand, have two sugar molecules in the form of sucrose (sugar cane, beet, maltose, and lactose) that is extracted from grains and animal milk. In the case of polysaccharides, which have 12 or more monosaccharide, they are in the form of cellulose, inulin and other non-flexible chains that are not as water-soluble.

Polysaccharides comprise of the compound of chondroitin sulfate that is the major

constituent of the body's cartilage tissues. Polysaccharides provide energy in the form of starches and glycogen in mammal's body. Oligosaccharide is comprised of two to ten monosaccharide chains (raffinose and stachyose) that have an effect on the digestive tract in general.

In order for the body to maintain its' DNA and RNA levels it has to have carbohydrates in the form of ribose, which is manufactured in the cells from glucose. Glycosamin chondroitin is the by-product of glycosaminoglycans (GAGs) is a complex carbohydrate that promotes the fluid motion that reduces and/or eliminates joints pain and inflammation.

The story of carbohydrates date back to ancient civilization where carbohydrates like oats and not only as food, but also as medicine. Carbohydrates are the major food groups of many cultures of the world. Many rely on carbohydrates in the form of rice, beans and grains to maintain life. The carbohydrates eaten by these cultures are not adulterated. It is interesting that whenever there is a national disaster or when the world feed refugees or other displaced starving people they are always given carbohydrates in the form of grains.

It is not the carbohydrates that are the major cause of overweight or obesity, it is the process by which they are being manufactured and consumed. The carbohydrates are being refined with all the nutrients and enzymes being striped away leaving nothing but empty calories that are undigestable. The processing of carbohydrates depletes the B vitamins, enzymes and other essential elements found in grains, beans, vegetables and sugars, which are needed to be digested and absorbed in the body in order to increase and maintain health. The natural fibers of these processed foods are also eliminated and can not be replaced synthetically like other nutrients, which results in the accumulation of waste-by-products in the small intestine causing constipation, gas, bowel, cardiovascular disease, bowel problems and other health disparities.

When the wastes-by-products of carbohydrates accumulate in the small intestine, they begin to distend the abdomen. This distention is the small intestine expanding to accommodate the excess amount of waste accumulating within its' walls. This excessive accumulation begins to leak into the blood (leaky gut syndrome) further causing the carbohydrate waste-by-products to also store in the adipose tissues (fat cells) resulting in weight gain. This increase of adipose tissue begins creating obstructions in the blood vessels and throughout the organ network.

Glycoprotiens, which are saccharides linked to proteins are another source of abdominal distention, accumulation of waste, and the leaky gut syndrome. When this starch and protein combinations does not digest in the body it putrefies and ferments resulting in unhealthy bowel conditions that lead to other health disparities.

There are two types of carbohydrates, complex and simple. Complex carbohydrates include grains, legumes, and vegetables. These are foods that do not have a sweet taste and are mostly starches. On the other hand, simple carbohydrates are sugars and do have a sweet taste, which include sucrose, sugars and fruits. When sweeteners are added to

grains, which are bad a combination, it changes the structure of the carbohydrate from a complex carbohydrate to a simple carbohydrate such as cakes, cookies, pies, etc. Because of their many monosaccharide chains, complex carbohydrates are further divided into high and low fiber categories.

Fiber is one of the principles of the complex carbohydrates and it is ability to move the bowels and prevent colon cancer and other types of disease. Dietary fiber also has an impact on diabetes and hypertension. This group of polysaccharides are undigestible and include as variety of foods such as almonds, wheat germ, psyllium seed and husk, beans, rice, barley, apples, green vegetables, etc. It is recommended by the World Health Organization (WHO) that each person consumes 25 to 40 grams of fiber daily. Most Americans only receive 12 to 18 grams a day. Humans need to incorporate plant fiber in their daily regiment because most of us eat undigestible foods that cause health disparities. Dr. Bernard Ginseng once said, "Death begins in the colon".

Your eating habit should consist of enough fruits, vegetables and grains that provides the nutrients and fiber needed to maintain good nutrition and positive bowel evacuation in a timely manner. Too much fiber can cause problems of bloating, gas, and cramping of the abdomen. Whenever you consume substances like brain or psyllium, you should drink 2 to 3 eight ounce glasses of water. If the fiber is not well lubricated then it can cause a host of bowel problems. Most vegetables, fruits and whole grains have a large amount of fiber that will increase peristaltic process of the colon.