

# Clemson Dining Services

## Nutrition News



### The Dangers of Misinformation

As I was driving home one day this past month, I heard a man on the radio talking about his program for weight loss and muscle building, essentially a program designed to increase overall health and fitness. One of the topics he spoke briefly about was on nutrition and needless to say, I was very excited to hear his recommendations. He is after all, a highly reputable personal trainer in the business over 30 years, so I was sure he had something great to offer. Essentially, eat whole foods, such as sweet potatoes, spinach, fish and avoid highly processed foods. He then spoke about sugar and how we should minimize, if

not eliminate, all refined sugar from our diet. He discussed the different types of sugars and talked about the differences between the simple sugars like glucose, lactose, fructose, etc. He began to elaborate on fructose and its relationship to fruit and this is where things got interesting! He said that on his program, one should limit the amount of fructose in your diet when you are in the initial stages of maximal fat burn because, as he put it, fructose interferes with fat burn by decreasing your metabolism, making it difficult to lose weight. He stated that one area you can cut fructose out of your diet was fruit. It was at this

point where I started to "disagree" with the man on the radio...as if he could hear me!

So according to his plan, you need to initially cut down on fruit in your diet (eventually including it again later) in order to cut fructose out of your diet, as it will have that negative metabolic effect on weight loss. I was witness to a nutrition myth in the making...lucky me! Now I'm going to dispel that myth right in front of your eyes.

There are two areas that need to be clarified: weight loss and fructose.

#### Weight Loss

First, let's address what healthy weight loss is. A healthy weight loss goal will differ from person to person, but a general rule of thumb is, if you are classified as overweight a 10% weight reduction is a realistic and achievable goal. Also, losing 1-2 lbs/week is recommended, as this slow weight loss will help to keep it off in the long run. For example, if you are 5' 6" tall and weigh 180 pounds, you would have a weight classification or body mass index (BMI) of 29, which is overweight. ([If you would like more information on BMI click here](#)). Setting the recommended 10%

reduction in weight your goal would be an 18 pound weight loss. If you lost it at 1-2 lbs/week, that would put you at 162 pounds in 2-4 months. Once you reach this goal, you would then reevaluate your BMI, recalculate your weight loss goal and repeat this process until your final weight loss goal is achieved. So remember, losing weight is losing weight, no matter what you call it or how you spin it. Do it in a healthy way and with the help of a professional.

So what did the trainer say that, quite frankly, made me want to join the show

and voice my thoughts? He, although unintentionally, created a nutrition myth. He made a generalization about avoiding fruit because it contained fructose and he focused on one very small part of a normal diet, the intake of fructose. He took the research out of context. So let's clear the air about fructose and high fructose corn syrup (HFCS) and focus on the bigger picture - the added sugar in your diet.



# The Dangers of Misinformation (contd.)

## Fructose

Fructose is naturally occurring simple sugar, found in many different foods and it's usually paired with glucose in varying ratios. The major sources of fructose in the typical American diet, however, are not naturally occurring fructose, but are sugars that are added into the food. These sugars are either refined sugar and/or high fructose corn syrup (HFCS). The major source of *naturally* occurring fructose is in fruit, as what was mentioned earlier! One apple has about 8 grams of fructose, one orange has about 6 grams of fructose, and one banana has about 7 grams of fructose. So will this intake of fructose ruin my efforts in losing weight? Let's look at the background of HFCS and refined sugar before I answer that question.

This year, there has been a lot of negative press on High Fructose Corn Syrup (HFCS). When HFCS was introduced into the food industry, the U.S. saw a corresponding rise in obesity, due to it being a cheaper sweetener than cane (table or refined) sugar. Since fructose is metabolized differently than glucose, its metabolites (metabolism byproducts) are direct precursors to fat synthesis, it was assumed that the fructose fraction in HFCS was causing individuals to gain weight. Not exactly! Both glucose and fructose are found in equivalent ratios in HFCS and cane sugar. So the issue is not increased consumption of fructose, it's the increased consumption of sugar due the HFCS being in liquid form at room temperature versus sugar being in a solid form at room temperature. This difference has allowed food manufactures to easily mix added sugar, the HFCS, into virtually any foodstuff, thus unintentionally increasing our intake of added sugar.

So, if you are actively trying to cut sugar out of your diet, the best place to begin is by evaluating how much added sugar you're ingesting, not cutting fruit out of your diet. By trying to cut fruit out of your diet, it would be a hindrance rather than a help. Fruit provides fiber, vitamins, minerals, and plenty of antioxidants and beneficial phytochemicals that you would not receive if you cut the fruit out of your diet. The World Health Organization (WHO) recommends that you limit the intake of added sugars to no more than 10% of your total calories. To put things into perspective, if you're an average-sized adult, ten percent of the amount of added sugar of your total daily calories is around 50 grams of sugar based on a 2000 calorie diet, or the equivalent of 1 tablespoon of table sugar, or one 16-ounce bottle of soda. Rather than trying to cut small amounts of naturally occurring fructose out of your diet found in fruit, focus on cutting back on the added sugar in your diet.

Here's a great place to get started on reducing your sugar intake.

**Sweetened Beverages – or “Liquid Candy”.** Like what was mentioned earlier, a 16 oz soda will contain an added 50 grams of sugar. Just don't drink it! Also, take a look at your coffee in the morning – two creams and two sugars? Or are you a specialty coffee person – which are generally loaded with added sugars. Instead, bring a reusable water bottle with you and fill it up with the numerous sugar free flavored drink mixes – saves calories and the environment!



This article was written in order to increase awareness about the prevalence of nutrition myths. I have received questions about nutritional topics that at one time had been sound in nature, but had become twisted with misinformation, so answering them was incredibly challenging. I hope that the previous editorials were helpful and informational. I encourage you to get the facts about nutrition from credible websites and outlets, not dot com's or media shows that are chock full of indirect endorsements. Feel free to send me any questions on nutrition that you may have. Email me at [nutrition@clemson.edu](mailto:nutrition@clemson.edu).

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