

## Problem Solvers 49 Proper Nutrition in Dentistry

Synonyms: Diet, Nutrition, dental health, artificial sweeteners, aspartame, xylitol.

Diets and infomercials are commonplace with the goal to help people lose weight. Almost 1/3 of all adult Americans are overweight or obese. The culprit is in part the 140 pounds of sugar each person consumes (on average) each year.

Consumers are being warned that there is too much fat and sugar in their diets and companies are eliminating “trans” fats and changing high fructose corn syrup to other sugars to try and regain consumer confidence. This problem solver will discuss some diet and nutrition issues that are important for good oral health.

The Food and Drug Administration has concluded that sugar used in high quantities contributes to obesity, cavities, dental plaque, and periodontal disease. The American Heart Association has further linked sugar to metabolic disorders, obesity, and vascular disease.

Studies have shown that almost one quarter of our calories comes from excess sugar! The American Heart Association has set a limit at 25 grams of added sugar per day for women. A typical soda is 40 grams of sugar!

What can we do to decrease our sugar intake?

Artificial sweeteners like Stevia, a plant extract, can increase the sweet flavor without increasing cavities or calories. So eliminating excess simple sugar from our diet by avoiding sugar sodas, candy, cookies and sports drinks will help dramatically! We need to read the labels to see what we are putting in our bodies.

When people eat a diet that is high in carbohydrates they are still eating sugar. The type of carbohydrate found in vegetables (complex carbohydrates) is not going to raise your blood sugar the way simple carbohydrates like glucose and sucrose will. Elevated blood sugar can promote fat storage and diabetes. So from a health point of view people should try and consume fresh fruits and vegetable instead of processed foods.

Artificial Sweeteners:

There are many sugar substitutes that do not feed bacteria that produce the acid that causes tooth decay. Some high potency super sweeteners are Acesulfame (Ace K), Stevia, Saccharine, Aspartame, Sucralose and Neotame. It is important to check

the label and see if there are other sweeteners like honey, molasses, or cane syrup, as these can be hidden in foods and may be misleading to the consumer.

In fact, one artificial sweetener; xylitol has been shown to stop the production of acid by the oral bacteria that cause cavities. Not only does it promote saliva production to help buffer any acidic environment in the mouth, but it has also been shown to help remineralize beginning cavities if 1 gram or more is chewed five times daily.

Dental health is tied to overall body health. If people have poor nutrition they will have a lowered immune system and become more susceptible to a myriad of diseases such as cardiovascular disease or periodontal disease.

What foods should I avoid that would be surprising, to avoid excess sugar?

Foods such as dried fruits, fruit juices, crackers, jellies and jams, sticky foods, and chips are all potentially bad for you in high quantities. These highly processed foods are either high in sugar or will break down into sugar rapidly. If you have these types of foods it is better to enjoy them with other healthy foods to decrease the sugar surge in your mouth and the increases bacteria levels these sugars will create.

The food pyramid has been replaced with a new graphic.

While the food guide has changed many times since it was first developed the latest incarnation can be found at [choosemyplate.com](http://choosemyplate.com) where people are being encouraged to make half of their plates fruit and vegetables. People are being encouraged to eat fish twice a week and avoiding high salt and high fat foods like deli sausages and bologna.

The old pyramid had bread rice cereal and pasta as the lowest rung (6-11 servings), which is the biggest part of our diet. The next tier is fruits (2-4 servings) and vegetables (3-5 servings) with the third tier being milk, cheese and yogurt (2-3 servings) and meat, poultry, fish dry beans, eggs and nuts (2-3 servings). The top of the pyramid is the fat, oils and sweets and they should be eaten in the smallest quantities for optimal health. This is from the U.S. Department of Agriculture and the U.S. Department of Health and Human Services. Michelle Obama was instrumental in modifying this model and creating a new version.

The new food guide called MyPyramid ([mypyramid.gov](http://mypyramid.gov)) is a colored graphic that has grains, vegetables, fruits, milk, meat and beans all on the lowest level with the proportions of each highlighted to the apex of the pyramid. They have coupled this with a plate that has fruits, grains, vegetables and protein on a plate with a small

dairy bowl off to the side. This was done to pictorially represent what people should be putting on their plates today.

What is the summary of important things to know?

Eat whole grains like oatmeal and whole-wheat pasta instead of white rice and white processed pastas.

Choose a variety of vegetables and eat them plentifully.

Eat fresh fruits instead of drinking high sugar fruit juices. Fruit juice may seem like a healthy choice but in high quantities it is sugar laden, calorie heavy and has none of the fiber of the whole fruit.

Choose lean proteins with little fat like chicken breasts (without skin) and fish (not deep fried!) and turkey or egg whites.

Enjoy beans, egg whites, low fat dairy like skim milk, salt free nuts and low fat yogurt.

Avoid 1% milk (or higher) or puddings or high fat cheeses.

Limit the amount of oil and fat and when you do choose oil use more cooking sprays to sauté your food or use small amounts of heart healthy olive oil.

Drink a lot of water to promote plaque fighting saliva production and keep your mouth well lubricated. Drinking water also helps eliminate other unhealthy drink choices!

Lastly, lower the amount of food you consume! Eating healthy has as much to do with what you don't consume as what you do eat. Eating any food to excess can have bad health effects.

Richard B. Winter D.D.S.M.A.G.D.D.I.C.O.I.  
Master Academy of General Dentistry  
Diplomate International Congress of Oral Implantologists  
[WWW.WINTERDENTAL.COM](http://WWW.WINTERDENTAL.COM)