

Thoughts on Dental Health

NUTRITION

1. Be grateful for your food
2. Chew your food well, you cannot overdue it.
3. When possible choose organic, locally grown or raised
4. FOODS TO AVOID
 - Do not eat anything your grandmother would not recognize as food
 - Do not eat anything that has more than 5 ingredients
 - Do not eat anything that you cannot pronounce
 - Do not eat anything that has high fructose corn syrup
 - Do not eat any foods that make health claims
 - Avoid eating when you're angry or upset
 - All flour
 - MSG or similar additives
 - Hydrogenated or Trans fats
5. Be aware many knowledgeable people believe the Western Diet is an important factor in chronic illness or disease; refer to Doctor Weston Price's research (see www.westonprice.org).
Refer to (Dr. Francis Pottinger cat study) (search Pottinger Price foundation)
6. Everyone according to genetic makeup and living environment needs a certain balance of carbohydrates, fats and proteins to supply energy and chemicals so that we function normally. Heating or other processing changes the chemical nature of food. This can be beneficial, making it easier to digest fully. It can also make food more difficult or impossible to digest; they become unrecognizable as food to our digestive tracts. Anything our body does not recognize triggers an immune response such as allergies and autoimmune disease (arthritis and colitis). Poorly digested foods can also contribute to ulcers and gastric reflux.
7. Food is more than the sum of its nutrients. The nutrients behave differently when artificially broken up by processing. Whole naturally occurring foods are better than supplements. These are nutrient dense. Try fresh fruit and vegetables of many colors. The darkest, deepest colors are better. Whole milk and dairy products are better than reduced fat. Note: most dairy products have been processed by pasteurization, which could be a problem for some. Lacto-fermented foods such as sour kraut and yogurts are beneficial because digestion is already started, friendly bacteria are replaced and healthy enzymes are present. Even whole grains should be minimized. Hydrogenated and Trans fats should be avoided. , these oils are broken down into usable but unhealthy fatty acids. Fats are necessary for health. Our brains and cell membranes are mainly made of fat. Eggs from free range chickens, salmon, chia seeds, and flaxseeds (which can be ground in a coffee grinder), and walnuts (soaked for 8 hours in water) are a good source of omega 3 fatty acids. Nut butters are also a good source of fat. Olive oil and Coconut oil (which has been shown to have anti-microbial activity in the intestinal tract) are good and can be used for cooking since they are more heat tolerant.

Coconut oil and coconut butter could be good for the immune system. Proteins should make about 25% of our diet and should be included with each meal. Vegetarian sources of protein include nuts, seeds (pumpkin and hemp are good) and beans. Proteins provide amino acids which are the body's building blocks and are directed by our genetic code for building our bodies. Food contains instructions that help our metabolism and affect our genes. That is why it is important to eat foods that are whole, real and fresh.

8 As the cost of processing foods (to make them cheaper, more convenient, and tastier) have gone down, the cost for treating chronic illness has increased even more.

9. After eating a meal to about 2/3 fullness, we should feel great emotionally, we should feel energized (not tired), we should not have any cravings.

10 There is a lot of controversy on diet. These thoughts could help point the way to a healthier lifestyle, which is the path that leads to true healthcare. Be an informed consumer and do your own research.

Suggested Reading:

Michael Pollan "The omnivores Dilemma"

Weston Price DDS "Nutrition and physical degeneration"

Francis M. Pottinger M.D. "Pottinger Cats: A study in Nutrition"

PROCESSED FOODS AND DENTAL HEALTH

Processed foods have been changed from their natural state to make them easier to use, increase shelf life and more appealing to consume. A simple rule of thumb is any food that comes in a bag or a box and is not a fruit or vegetable has been processed. This processing removes and alters vitamins, minerals and other nutrients that support our immune system and health. Enriching attempts to replace these lost nutrients. The following study emphasizes the importance of reducing these types of foods from our diet.

Dr. Weston Price, a dentist and internationally famous researcher on nutrition did **THE MOST POWERFUL DOCUMENTATION** of the effect of a deficient and inadequate diet on human physical and mental degeneration. His study of fourteen indigenous cultures, published in 1939 in his book *Nutrition and Physical Degeneration*, is a classic.

These studies are unique because they were done around the time that processed foods were introduced into these cultures. This allowed Dr. Price the opportunity to compare the health of indigenous people of the same racial stock who stayed on the indigenous natural diet to those who began eating the industrialized processed food. He was even able to compare changes in the health of offspring of parents who changed their diets to processed foods in the middle of the child-rearing cycle.

Price made several generalizations based on his scientific data. The indigenous diets in each culture contained two to six times the nutrients as the process-food diets that were introduced as a process of “modernization.” The people who stayed with their traditional diet maintained a high level of immunity to dental caries. Those on the processed diet of modern commerce lost their immunity to caries. Price found that those who had lost their immunity because of poor nutrition were able to halt the process of dental cavities by reverting back to a natural diet or taking special supplements that were equivalent to the nutritional content of their indigenous diets. The results are noteworthy. For example, Weston Price found that by putting children back on a healthy diet, the epidemic of caries could be stopped in some of the indigenous cultures he studied. In some modernized tribes that rate of caries jumped from less than 1% on their whole, natural, organic, indigenous diet to up to 60% on the processed-food diet. One of the most radical findings was the gross structural change that occurred in only one generation in the head and facial structure. These included changes in the dental arch, narrowing and lengthening of the face, hips, and chest, and significant changes in the bones of the head, especially the maxillary bones. It is most significant that these changes occurred in a single generation when the diet changed, rather than over many generations as might be expected if such changes were primarily genetic.

Another interesting finding was in the families of modernized indigenous and modernized white people eating the process foods. There was a tendency for more structural and mental damage to occur in children born in the later part of the birth cycle. This suggests depletion and lowering of reproductive capacity in the parents who had switched to the modernized, processed foods. With the indigenous people who stayed on their natural pre-modernization diet, there was no tendency for more congenital changes and mental deterioration with the younger children.

Based on my studies and readings from other sources, I believe that processed foods (especially those that contain white flour and sugar) are a contributing factors to a breakdown of dental health through cavities and infection of the gum and supporting bone.

The mouth is considered a window to the rest of the body, warning us that more serious disease may lie ahead if present life styles are not changed.

These ideas are offered as food for thought.

KICKING THE SUGAR HABIT

Refined sugar is sweet and satisfying, potentially addicting, and possibly responsible for a wide range of health problems.

It's almost four o'clock in the afternoon. The candy, the cookies, the sweetened coffee are calling out to you. All your body needs is a little lift to get you through the rest of the afternoon and –you hope– the evening. Aah, the whisper of sweet nothings! One bite can make you feel normal again.

Does this describe you? Let me assure you, then, that you could spend your lifetime trying to satisfy your sweet tooth, for the more sugar you consume, the more you will crave. This highly addictive substance can rob your body of essential nutrients, weaken your immune system, and wreak havoc on your central nervous system. If you suffer from such nondescript health problems as unexplained headaches, fatigue, food allergies, or candida, take a good look at your sugar consumption, for many health experts agree that we are profoundly-and often negatively-affected by the amount of refined sugar in our diets.

How sweet it is! Nancy Appleton, Ph.D., a clinical nutritionist and author of “Lick the Sugar Habit”, notes that Americans consume an average of 149 pounds of sugar per person each year. “Some teenagers eat twice that,” adds Dr. Appleton, who admits to having been a “sugaraholic” when she was a child and young adult. But her habits changed when she learned about the body's chemistry and how difficult it is to digest refined sugar. When she was in her forties, Dr. Appleton read “The Pulse Test” by Authur F. Coca, at the recommendation of a friend and, as the book predicted, observed how her heart rate jumped when she ate sugary foods. As a result, she decided to alter her lifestyle and remove refined sugars from her diet. Having cured herself of “dangerous dietary habits,” as she puts it, Dr. Appleton has put the allergies, headaches, and fatigue that troubled her youth behind her.

“Every time you eat refined sugar,” says Dr. Appleton, “you throw off your entire body chemistry. Basically it comes down to the fact that we simply do not have the enzymes needed to digest these highly processed sugars-and improperly digested sugars that get into the bloodstream can cause allergies and a whole host of other autoimmune disorders.” In autoimmune disorders, the immune system mistakenly attacks the body's tissues. (This condition-sugars that have not been fully digested getting into the bloodstream prematurely-is widely known as leaky gut syndrome.)

Studies also show that refined sugar suppresses the body's mineral balance and immune system. Furthermore, Dr. Appleton asserts that when the body is out of homeostasis (balance or equilibrium) owing to excessive sugar consumption, the following maladies can arise: chronic fatigue, candida, obesity, mood swings and depression, blurred vision, insomnia, arthritis, asthma, hypoglycemia (diabetes), osteoporosis, migraines, PMS, inflammatory bowel disease, gallstones, and cancers of the breast, ovaries, prostate, rectum, colon, and gall bladder. Dr. Appleton observes that for many people wheat allergies arise because wheat is consumed with sugar. “Read your labels,” warns Dr. Appleton. “Sugar is the cheapest filler available! Ketchup is 64% sugar, while cranberry sauce is 94% sugar.”

By other names-“What irritates me is high fructose corn syrup”, says licensed acupuncturist Randall Willens, of Santa Rosa, Ca. Dr. Willens helps his patients become more aware of their sugar cravings and teaches them how to avoid highly refined sugars. “Many companies that use it advertise their products as being ‘all natural’ which is misleading to the consumer,” he notes. “Many times the main ingredient in all-natural products and juices is high fructose corn syrup, which is just as unhealthy as white sugar.

Refined sugars from corn include corn syrup, fructose, dextrose, and dextrin. Refined sugar from beets and sugar canes is sucrose. Other sweeteners that attack the body's immune system are glucose, brown sugar, raw sugar, and commercial blends of maple syrup that may contain high fructose corn

syrup. Dr. Willens suggests that his patients satisfy their sweet tooth with fruit or sweet vegetables like sweet potatoes and carrots. If they have to use a sweetener, he suggests rice syrup or barley malt. "The more complex the sugar-like that in fruit," says Dr. Willens, "the longer it takes for the body to break down-and that's much better for your body."

Pulling the sweet tooth-In Chinese medicine the liver is considered to be the main organ of emotional balance. Dr. Willens says, "Sugar abuse-often triggered by emotional component-puts stress on the liver while the spleen and pancreas go undernourished." Signs and symptoms of sugar abuse he points out, are enlarged, pale tongue often with tooth marks around it's edges, a weak pulse, general malaise, tiredness and fatigue, loose bowel movements, jaundice and dizziness. For women, a full range of irregular menstrual problems may also be present.

Dr. Willens suggests that acupuncture can restore health to the spleen, pancreas, and liver. He often prescribes the herbs ginseng and astragalus to fortify the spleen and buplever, sometimes known commercially as bupleurum and peony root to quiet the liver. Dosages and herbal formulas (tonics, teas, pills, etc.) depend on individual need. Dr. Willens also asks that his patients begin stretching for he finds that stretching exercises help people get "in touch" with themselves. Teaching them to "experience for themselves what sugar is doing to them".

"Because refined sugar is so highly addictive," says James Balch, M.D., author of "Prescription for Nutritional Healing". "I find that it is best for sugar abusers to eliminate it from their diets entirely." He also urges parents to take junk food and sugar out of their children's diets, if only for a few weeks to see what happens.

When trying to cut back on sugar intake, Dr. Balch cautions against the abuse of sugar substitutes like aspartame, especially for children, as he believes it can hinder the development of a child's central nervous system, brain and immune systems. "Aspartame is used in such small amounts," he notes, "because it is 200 times sweeter than sugar. He also adds that he suspects that the methyl alcohol in aspartame can lead to headaches, mood swings, vision problems, mental loss, confusion, nausea, diarrhea, spleen disorders and in some cases convulsions.

Rather than sugar substitutes, Dr. Balch advises sugar addicts who are trying to quit to supplement their diets with high doses of water soluble B complete vitamins, for high doses of the B complex help those who suffer from addictive syndromes. He also suggests taking the trace mineral Chromium Picolinate. "Chromium helps balance sugar levels whether they are high or low," explains Dr. Balch. He recommends beginning with 200 micrograms (taken with food) and slowly building up to 400-600 micrograms a day (taken with food). To ease sugar cravings, Dr. Balch has found the amino acids like glutamine-often used by recovering alcoholics to fight cravings-to be helpful (he suggests following prescribed doses), but he maintains the way of ending sugar cravings is to eat an unprocessed foods diet (fresh fruits and vegetables and whole grains) with plenty of complex carbohydrates. "Glutamine may help control your sweet tooth cravings to a point, but the cravings cannot be overcome unless people are willing to change their dietary lifestyle."

Soft drinks & soda often contains high levels of sugar. It is also very acidic. See pH values compared to water, which has a pH level of 7.0

For more information visit www.modental.org

Check the label

Always read the label! Regular soft drinks contain acid and sugar that can lead to tooth decay. Diet or "sugar free" drinks may not have sugar, but most always contain acid. Even much flavored milk have loads of extra sugar!

<u>Nutrition Facts</u>	-	<u>Nutrition Facts</u>
<u>Serv Size 1 can (regular)</u>		<u>Serv. Size 1 can (Diet)</u>
<u>Amount Per Serving</u>		<u>Amount Per Serving</u>
<u>Calories 140</u>		<u>Calories 0</u>
<u>Total Fat 0</u>		<u>Total Fat 0</u>
<u>Sodium 50mg</u>		<u>Sodium 40mg</u>
<u>Total Carb 39g</u>		<u>Total Carb 0g</u>
<u>Sugar 39g</u>		<u>Sugar 0g</u>
<u>Protein 0g</u>		<u>Protein 0g</u>

CARBONATED WATER, HIGH FRUCTOSE CORN SYRUP AND/OR SUCROSE, CARMEL COLOR PHOSPHORIC ACID , NATURAL FLAVORS, CAFFEINE	CARBONATED WATER, CAMEL COLOR, ASPARTAME PHOSPHORIC ACID , POTASSIUM BENZOATE (to protect taste), NATURAL FLAVORS, CITRIC ACID
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What is pH anyway and what does it mean for my oral health?

A normal mouth has a pH of 6.8 to 7.2, which is close to neutral with no damage done to the teeth. Tooth enamel begins to de-mineralize (dissolve) at pH levels below 5.5. Soda has an average pH of 2.5, which is far below this point and very acidic. Enamel is the hardest substance in the body, but it becomes porous and soft when exposed to acid. Tooth enamel erosion is extremely harmful because it weakens the tooth and makes it prone to decay and breakage. Enamel (and thus teeth) wears out faster when it's been weakened. Just think: you only have one set of teeth (and enamel) that's meant to last you a lifetime. Take care of them!

	pH (acid) level	Sugar Amount**
	Low number =	Per 12-ounce
	Bad for teeth	serving
<u>Pure Water</u>	<u>7.0 (Neutral)</u>	<u>0.0</u>
<u>Coffee (Average, Black)</u>	<u>5.00</u>	<u>0.0</u>
<u>Barg's Root Beer</u>	<u>4.61</u>	<u>10.71 tsp.</u>
<u>Diet Dr. Pepper</u>	<u>3.41</u>	<u>0.0</u>
<u>Juicy-Juice (Berry)</u>	<u>3.40</u>	<u>9.75 tsp.</u>
<u>Fresca</u>	<u>3.20</u>	<u>0.0</u>
<u>Diet Sprite</u>	<u>3.17</u>	<u>0.0</u>
<u>Red Bull Energy Drink</u>	<u>3.10</u>	<u>9.29 tsp.</u>
<u>Nestea</u>	<u>3.04</u>	<u>6.07 tsp.</u>
<u>Propel (Berry)</u>	<u>3.02</u>	<u>0.71 tsp</u>
<u>Diet Mountain Dew</u>	<u>2.95</u>	<u>0.0</u>
<u>Dr. Pepper</u>	<u>2.92</u>	<u>9.64 tsp</u>
<u>Sprite</u>	<u>2.90</u>	<u>9.29 tsp</u>
<u>Gatorade (Lemon Lime)</u>	<u>2.83</u>	<u>5 tsp</u>
<u>Mountain Dew</u>	<u>2.80</u>	<u>11.07 tsp</u>
<u>Minute Maid Orange Soda</u>	<u>2.80</u>	<u>11.2 tsp</u>
<u>Diet Pepsi</u>	<u>2.77</u>	<u>0.0</u>
<u>Diet Coke</u>	<u>2.70</u>	<u>0.0</u>
<u>Powerade</u>	<u>2.63</u>	<u>5.36 tsp</u>
<u>Pepsi</u>	<u>2.43</u>	<u>9.64 tsp</u>
<u>Coca-Cola</u>	<u>2.30</u>	<u>9.64 tsp</u>
<u>Battery Acid (Yikes!)</u>	<u>1.00 (Acidic)</u>	<u>0.0</u>

Can you imagine eating that much sugar?

Spoon out 10 level teaspoons of sugar (actually high fructose corn syrup) to see about how much is in a 12-ounce can of regular soda. Now spoon out 17 teaspoons for a 20-ounce bottle. Can you imagine eating that much sugar at one time?! If you think diet soda is better, think again. It may not have the sugar but still contains acid that can harm tooth enamel, which can lead to decay.

It's not just "soft drinks" that is the problem. Many other beverages, like sports drinks and fruit juices, have sugar and acid, which can cause decay.

How tooth decay starts:

- Soda and other soft drinks have lots of refined sugar, such as high fructose corn syrup. Bacteria in the mouth process the sugar and produce acid.
- This acid, plus the extra acid already present in the drink demineralizes your tooth enamel, the outer coating of the teeth that guards against decay.
- Tooth decay (cavities) begins when enamel is weakened.
- Each acid attack lasts about 20 minutes, and each sip you take resets the clock.
- Remember! Diet or "sugar free" drinks may not have sugar, but usually contain harmful acid.

How to reduce decay:

- Choose water; it's best for your hydration and health
- Don't sip soda all day; drink a serving all at once. Sipping exposes teeth to prolonged sugar and acid attacks.
- If you do drink soda, sports drinks or fruit juices do so in moderation – not more than a 12-ounce serving per day. And, it's best to drink it with a meal.
- After having a soft drink, brush your teeth. If you can't brush, rinse your mouth with water to dilute the sugar and acid, or chew gum to contains Xylitol, a sugar substitute shown to discourage tooth decay.
- Brush at least twice daily (especially before bed) with fluoride toothpaste; floss daily to remove plaque buildup between teeth and along gums.
- See your dentist for regular checkups and cleanings.

Americans consume huge quantities of soft drinks each year. Enough soft drinks are produced annually to provide 725 12-ounce servings (equivalent to more than 30 cases) to every man, woman and child.

Enough is enough!

Soft drinks, juices and sports drinks provide huge amounts of sugars to many diets. Each day, soda consumption alone provides the average teenage boy about 15 teaspoons of refined sugars, the average girl about 10 teaspoons. These amounts roughly equal the recommended daily limits for teens' sugar consumption from all foods.

Why should you care?

No matter what it's called- a soft drink, soda or pop- drinking too much can cause tooth decay and harm your health. Sugar and acid in soft drinks, juices and sports drinks can set up the perfect environment for tooth decay. Drinking too much of these beverage likely contributes to other health problems, such as osteoporosis, kidney stones, and especially overweight and obesity, which are prime risk factors for type 2 diabetes in teens and adults.

Soft drinks are a problem not only for what they contain, but also for what they push out of the diet, including vitamins, minerals and fiber. Less than 50 % of adolescent girls consume enough calcium daily, which can lead to early development of osteoporosis. Girls who drink carbonated beverages are 5 times more likely to have bone fractures than those who don't drink soda.

THOUGHTS ON DECAY

Tooth decay (dental caries) is a transmissible infectious and acid related disease that removes minerals from the teeth. This means the bacteria which contribute can be given from those who have cavities to those who have not yet developed cavities (i.e. young children). There are several risk factors that contribute to making people more prone to developing cavities, these include:

1. The kinds of foods we eat and how often we eat them
2. The type of bacteria that populate our mouth, of the 700 types of bacteria found in our mouth about 10 can cause decay, these are the bacteria that can be transmitted from care givers with cavities to children
3. Home care: how and how often we clean our teeth
4. Oral appliances such as orthodontic braces and removable partial dentures
5. The health of our saliva: PH (some saliva is more acidic and does not neutralize the acid from foods and acid producing bacteria. The PH of the saliva should be 6.8-7.2 it can reach a Ph of 8 during chewing. There are 400 medications that can reduce the amount of saliva we produce causing Xerostomia or dry mouth. How we brush and clean our teeth may not prevent decay when other risk factors are present.
6. When the teeth are clean and the saliva is healthy the minerals that are lost during eating are put back into the teeth.

Establishing your risk for decay is the first step in developing a plan to not only treat cavities but also prevent them. Patients can be placed in 3 categories:

Low risk: less than 24 % chance of developing a new cavity in 12 months

Moderate risk: a 39% chance of developing a new cavity in 12 months

High Risk: 70-88% chance of developing a new cavity in 12 months

We will use a risk assessment to help you with this process. Please review and complete your part of the risk assessment.

PERIODONTAL DISEASE

If you have been told you have periodontal disease (also known as gum disease or periodontitis), you're not alone. **An estimated 80% of American adults currently have some form of the disease.** Periodontal diseases range from simple gum inflammation to serious disease that results in major damage to the soft tissue and bone that support the teeth. In the worst cases, teeth are lost.

Gum disease is a threat to your oral health. **Research is also pointing to health effects of periodontal diseases that go well beyond your mouth.**

What is Periodontal Disease?

"Perio" means around, and "dental" refers to teeth. **Periodontal disease is an infection of the structures around the teeth, including the gums and the bones that hold the teeth.** The earliest stage of periodontal disease is gingivitis - an infection of the gums. In more severe forms of the disease, all of the tissues are involved, including the bone. Bacteria that live and reproduce on the teeth and gums cause periodontal disease.

Symptoms of Periodontal Disease

Symptoms may include the following:

- **redness or bleeding** of gums while brushing teeth or using dental floss
- **halitosis**, or bad breath
- **gum recession**, resulting in apparent lengthening of teeth
- **"pockets" between the teeth and gums** indicating that the bone which holds the teeth in the mouth is dissolving
- **loose teeth**

Gum inflammation and bone destruction are largely painless. Hence, people may wrongly assume that **painless bleeding after teeth cleaning** is insignificant, although this may be a symptom of progressing periodontitis. If your hands bleed when you wash them, you would be concerned. Yet, many people think it's normal if their gums bleed when they brush or floss.

Periodontal Disease Affects Your Health

Periodontal disease is a putrid, festering infection of the mouth. Bacteria and inflammatory particles can enter the bloodstream through ulcerated and bleeding gums and travel to the heart and other organs. In recent years, **gum disease has been linked to a number of health problems.**

Researchers are studying possible connections between gum disease and:

- **Heart disease:** Gum disease may increase the risk of heart disease, Gum disease also is believed to worsen existing heart disease.
- **Stroke:** Gum disease may increase the risk of the type of stroke caused by blocked arteries
- **Diabetes:** People with diabetes and periodontal disease may be more likely to have trouble controlling their blood sugar than diabetics with healthy gums.
- **Premature births:** A woman who has gum diseases during pregnancy may be more likely to deliver her baby too early and the infant may be more likely to be a low birth weight.
- **Infectious:** Bacteria can be transferred to others through saliva such as: drinking after someone, blowing on foods, kissing.

INFLAMMATION

Inflammation, like stress, is a nonspecific reaction by the body. This means it happens the same way all the time. It starts as a call for help by the cells of our body when they are not happy. The signs of inflammation are: pain, swelling, redness and heat. Usually, it takes 8-10 days to resolve and helps prevent infection and while healing occurs. This is a normal process and is beneficial. Inflammation must be regulated, otherwise we can have too much or too little.

1. Too much inflammation can lead to: autoimmune disorders, fibromyalgia, chronic fatigue, atherosclerosis, ulcers, obesity, sinusitis and allergies.
2. Too little inflammation can lead to infection and cancer.
3. Additionally, inflammatory chemicals also cross the blood brain barrier, inflaming brain cells. This can contribute to headaches, seizures, depression, dementia, increased sensitivity to pain, and many cases of autism.

Inflammation and stress are closely linked. All healing must return these responses to normal function. This is the goal of Functional Medicine's approach to treatment.

All infection causes inflammation. Red, bleeding gums are infected and inflamed.

Four healthy habits:

1. Healthy thinking by changing our perception about life's events to include: mindfulness(being present on purpose and without judgement), patience, compassion, and forgiveness.
2. Healthy breathing provides adequate, oxygen, helps normalize stress, and maintain chemical balance in and around cells, tissues and organs.
3. Healthy drinking is ½ ounce water per pound of body weight.
4. Healthy diet includes: unprocessed, high quality, organic when possible, nutrient dense foods that contain naturally occurring vitamins, minerals, and possibly enzymes to help completely digest the food so that it can be used effectively in our body, without causing inflammation. Calories only provide energy. Enzymes also help in the elimination of toxins, destruction of harmful bacteria, building and repair, and destruction of blood clots.

STRESS

Stress is a non-specific response or adaptation by the body to what it perceives as not safe. Non-specific means that the response is always the same, sympathetic nervous dominance causing: increased heart rate and blood pressure, increased blood levels of the hormones cortisol and adrenaline to increase energy and strength in the muscles, increased blood sugar; decreased function in: digestion, the immune system, higher brain function affecting memory and decision making ability and the reproductive system.

The stressors which cause a stress response can be physical, emotional, and or toxins from diet and the environment. All negative thoughts such as fear, anger, resentment, bitterness unforgiveness, jealousy, envy, worry and anxiety can cause a stress response. Ideally, the body's stress adaptation is short lived, followed by a quick recovery to a state of peace and calm, parasympathetic nervous dominance. When there is little or no recovery, stress becomes chronic. This can lead to inflammatory damage to the: digestive tract contributing to ulcers and bowel problems, the nervous system causing memory loss and learning difficulties, cardiovascular system, endocrine system (hormones) causing thyroid problems and weight gain, and the immune system contributing to allergies, cancer, and autoimmune diseases, which means the immune system is attacking the body. There is research to show all chronic disease is autoimmune in nature and stress is a factor in all chronic disease. In dental examinations I see signs of chronic stress such as: wear patterns on the teeth, scalloping marks on the tongue, and white lines on the inside of the cheeks.

There are ways to help recover and return to the peaceful, calm parasympathetic state so the body can rebuild and repair in preparation for the next stressful event.

1. Breath: slow, deep, nasal, and diaphragmatic breathing.
2. Diet: eating whole, nutrient dense organic foods; and drinking clean water. (treated by distilling or reverse osmosis is best)
3. Mental relaxation: finding peace and joy in the present moment while being unaware of past or future events. Focusing on breathing is a good way to start mental relaxation.

You should brush your teeth thoroughly at least twice a day to remove plaque and to prevent tooth decay. Follow the steps below for proper brushing. Contact your dentist if you have any questions.



1. Place your toothbrush at a 45-degree angle to your gums.



2. Brush gently in a circular motion.



3. Brush the outer, inner and chewing surfaces of each tooth.



4. Use the tip of your brush for the inner surface of your front teeth.

Brushing

Dry-Brush your Teeth!

Do it before you brush with toothpaste and water and you'll cut tartar by 60%, and reduce the risk of bleeding gums by half. Use a dry, soft brush to scrub the insides of your top and bottom teeth, then buff the outer surfaces. Rinse, spit, and then brush with toothpaste.

What is the best technique for brushing?

There are a number of effective brushing techniques. Patients are advised to check with their dentist or hygienist to determine which technique is best for them, since tooth position and gum condition vary.

One effective, easy-to-remember technique involves using a circular or elliptical motion to brush a couple of teeth at a time, gradually covering the entire mouth.

Place a toothbrush beside your teeth at a 45 degree angle and gently brush teeth in a elliptical motion. Brush the outside of the teeth, inside of the teeth, your tongue and chewing surfaces and in between teeth.

Using a back and forth motion causes the gum surface to recede, or can expose the root surface or make the root surface tender. You also risk wearing down the gum line.

Soft or hard bristles?

In general, a toothbrush head should be small (1" by $\frac{1}{2}$ ") for easy access. It should have a long, wide handle for a firm grasp. It should have soft, nylon bristles with round ends. Some brushes are too abrasive and can wear down teeth. A soft, rounded, multitufted brush can clean teeth effectively. Press just firmly enough to reach the spaces between the teeth as well as the surface. Medium and hard bristles are not recommended.

How long should I brush?

It might be a good idea to brush with the radio on, since dentist generally recommend brushing 3-4 minutes, the length of an average song. Using an egg timer is another way to measure your brushing time. Patients generally think they're brushing longer, but most spend less than a minute brushing.

To make sure you're doing a thorough job and not missing any spots, patients are advised to brush the full 3-4 minutes twice a day, instead of brushing quickly five or more times through the day.

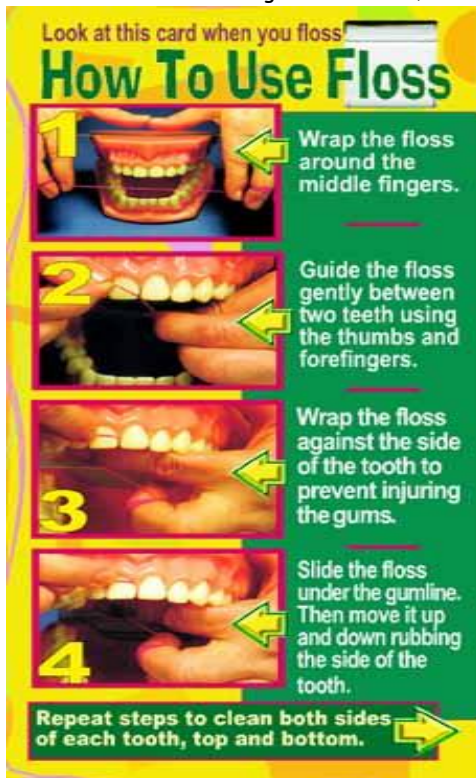
Should I brush at work?

Definitely, but most Americans don't brush during the workday. Yet a survey by Oral-B Laboratories and the Academy of General Dentistry shows if you keep a toothbrush at work, the chances you will brush during the day increase by 65%. Dentists recommend keeping a toothbrush at work.

Getting the debris off teeth right away stops sugary snacks from turning to damaging acids, and catches starchy foods like potato chips before they turn to cavity-causing sugar. If you brush with fluoride tooth-paste in the morning and before going to bed, you don't even need to use toothpaste at work. You can just brush and rinse before heading back to the desk. If you don't have a toothbrush, rinsing your mouth with water for 30 seconds after lunch also helps.

The following tips may improve your work-time brushing habits:

- Post a sticky note on your desk or computer at work as a reminder to brush teeth after lunch.
- Brush teeth right after lunch, before you become absorbed in work.



- Store your toothbrush and toothpaste at work in a convenient and handy place.
- Make brushing your teeth part of your freshening up routine at work.

Flossing is used to remove plaque between your teeth, where brushing cannot reach. Plaque is a sticky white film that collects on your teeth. It contains harmful bacteria that are the major cause of both tooth decay and gum disease. It is recommended that flossing be performed once each day.

To begin flossing, wind a length of floss (about 18 inches) around both middle fingers as shown 1. Most of the floss should be wrapped around one middle finger. As the floss is used up during flossing, it is to be transferred to the other middle finger. The forefingers are used to guide the floss between the teeth. #2 about one to two inches of floss are then carried smoothly between the teeth. 3 (Never snap the floss between your teeth. This could injure the gums.) The floss should then be wrapped around each tooth and slid gently beneath the gums and teeth. Finally, slide the floss up and down along each tooth. This procedure is repeated throughout the mouth, between all teeth.

There are many types of dental floss available on the market. Your Dentist or Hygienist will help you select the best floss for you and may provide special instructions for the flossing of your individual dental work.

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For more information about brushing properly, and how to stop over-brushing, go to <https://draxe.com/how-to-brush-your-teeth-stop-over-brushing/>

Developing Healthy Habits

A habit is an automatic response and does not require conscious thought. It can be a thought, emotion, or action. Habits are learned behaviors that become a permanent part of the brain's memory. They allow the brain to multitask. The brain does not distinguish or judge habits. It attempts to make our life situation better by focusing on what will happen in the next ten minutes and not on the long term consequences. The brain processes information from three sources that activate the body's response: the external environment, internal physiology (what causes the body to work), and what is socially acceptable. Habits are reinforced by responses that are considered rewarding.

Since habits can be overridden by conscious thought, new, healthier habits can be learned to replace unhealthy ones. Relapse is part of the process; therefore trying is the most important aspect. Success is secondary. The first step is placing value on health and having a desire to change. Secondly, become aware of the cues, emotional states and thoughts that trigger unhealthy habits. The key words to remember are: cue, habit, and reward. Use a cue that you think, say or do frequently during the day, then practice the habit every time you experience the cue and immediately reward yourself with small pieces of dark chocolate (high cocoa content, low processed sugar) or some other treat. Dark chocolate causes the brain to release oxytocin, a chemical that increases the brain's ability to rewire. You can effectively change an undesirable habit by keeping the same cue/reward and substituting a desirable habit. Always use the cue, habit, reward technique. Also try to surround yourself with opportunities to engage in activities that do not activate unhealthy habits. It is better to not focus on the unhealthy habit: instead increase enriching activities that develop healthy ones. Ways to increase success include: practicing observing others who not only demonstrate the healthy habit, but also encourage it in you, by reducing anxiety. Stress related anxiety overloads the conscious part of our brain and allows the unconscious habit in our memory to take control. There are many relaxation techniques that can reduce anxiety such as: relaxed breathing, mindfulness based stress reduction (MSBR), and Heartmath. Other helpful hints include: allowing healthy activities to be enjoyable, learning problem solving and coping skills so that challenges become opportunities, and improving social interactions that inspire healthy living. Try not to deprive yourself. Create positive associations with healthful behavior, connect with friends and support groups that will aid you in developing healthy habits, which are the key to happiness and good health.

Are silver fillings safe?

Dental amalgams have been used to repair decayed teeth for over 150 years. They are also called silver fillings. Although silver is a large component in amalgam, it also contains fifty percent mercury. Mercury is a known neurotoxin which can contribute to brain and nervous system dysfunction. It may also have toxic effects on the cardio-vascular system, increasing the risk of heart attack, high blood pressure, and atherosclerosis (hardening of the arteries). Check out www.ncbi.nlm.gov. Mercury is considered an endocrine disrupter, which means it can attach to hormones and negatively affect their function. Hormone dysfunction can be the cause of disease in organ systems related to the sex glands and the thyroid gland.

The American Dental Association and the Food and Drug Administration approve amalgams as safe. They also have established guidelines for disposal to reduce the risk of environmental damage because amalgam is considered a hazardous waste. In other words, it is safe in the mouth but not in the trash or sewer.

The debate over the safety of dental amalgam is related to how much of the mercury vapor is released into the body during placement and over time when eating. I have not used amalgam in over twenty years.

Amalgams are routinely removed when there is new decay or they fracture. Since mercury expands more than tooth structure as the temperature rises, it could be responsible for tooth fracture. It is not uncommon to see small fracture lines around silver fillings. Usually, when these fillings are removed little or no precaution is taken to reduce the amount of mercury released into or onto the patient, This is because extra time and expense is required to take the precautions necessary to limit exposure to the patient. Insurance companies and most patients are not willing to pay the extra cost.

If you suspect a mercury related health problem, then consult a health care provider for testing. Tests may include fecal material for heavy metals, blood, urine and or hair analysis. If mercury is a factor in your health, consult a biological dentist who can remove the amalgam more safely. This would include adequate isolation and nutritional support. You can also discuss the options for replacement of the filling and associated risks. Happiness and good health.

For additional information, check out the following video on YouTube.

https://www.youtube.com/attribution_link?a=kaVOhDBbhL8&u=%2Fwatch%3Fv%3DN4h_9nyyHU%26feature%3Dshare

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