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The Stone Fruits are Coming!

Summer is here! Well, almost. When the fog finally disappears, the long sunny days will start super charging all our favorite summer fruits. Just about everyone loves stone fruits. The stone fruits include peaches, nectarines, apricots and cherries (that big seed is the “stone”). When the sun comes out and these fruits mature into their wonderfully sweet, melt in your mouth, true selves, people will begin to swarm the local growers at the farmer’s market.



I’ll be there along with just about everyone else in town throwing elbows just to get to the free samples. Maybe that’s why they’re called stone fruits.

None of the stone fruits store starch, which means that they don’t get any sweeter after harvest. They do however soften and develop aromatic compounds. Because of this it is important to purchase fruit that has been grown by patient farmers who wait for the sun to fully ripen their fruit. All of these fruits are rich in phenolic compounds which are powerful antioxidants. Buy stone fruits in small batches and don’t refrigerate them until they are soft (like an avocado). Even still, they will only last for a few days in the fridge. The only exception to this are cherries which can be refrigerated immediately and will last about a week.

Apricots are a very temperamental stone fruit that seem to do well in areas with mild winters. Santa Barbara definitely fits the bill so we always have some great apricots to enjoy. What separates apricots from their siblings is their high pectin content. Pectin is an indigestible carbohydrate that is found in many fruit’s cell walls. It is often isolated for use as a thickening agent, mostly in jams and jellies. In fresh apricots it is partly responsible for their luscious texture. It is also what creates the especially meaty texture of dried apricots. Because pectin is a fiber, it can be useful in lowering cholesterol and combating heart disease.

Another favorite (and swarm maker) are cherries. Cherries fall into two main groups. Sweet and sour cherries differ in the amount of sugars produced in the fruit. As the name implies sweet cherries have a higher sugar content and are thus much sweeter. This is the variety that is almost always found fresh at the market. Sour cherries are generally processed

for use in canned goods, preserves, etc. Fresh cherries come in many varieties ranging in color from yellow to dark purple. The red pigment in the darker cherries comes from ellagic acid which has been shown to prevent and even reverse the growth of cancer cells. Cherries are also an exceptional source for Vitamin C (an anti-inflammatory) which might be partly responsible for their usefulness in treating joint disorders.

Peaches and nectarines are close relatives. The main difference between the two is that nectarines have a smoother skin, smaller size and more aromatics. Both fruits can have either yellow or white flesh that is firm or soft with either a cling-stone (a seed that sticks to the flesh) or a freestone (a seed that comes free from the flesh effortlessly). Why do the peaches at the market taste so much better than the ones at the grocery store? Prolonged cold storage interferes with the pectin breakdown creating mealy flesh. Nectarines seem to have higher levels of potassium, beta carotene, and Vitamin C than peaches. This makes sense. Nectarines generally have more pigments and possess a more complex flavor. This is almost always an indication of higher micronutrient and phytonutrient content.

The stone fruits are coming. Are you ready? The Educated Vegetable is. From cobbler to savory sauces this summers stone fruits will definitely be on the menu.



Too Sweet for Comfort

Everyone knows that large amounts of refined sugars in one's diet is extremely detrimental to health. High sugar intake over extended periods of time can cause many different health disorders and aggravate just about any health problem in the book. In an effort to reduce the amount of sugar, and calories from it, in their diet many people will turn to artificial sweeteners. Unfortunately, as is usually the case, the artificial product is extremely hard on the body and causes a large array of its own health problems. There are a few major artificial sweeteners on the market right now. Each creates sweetness and disease in its own way.



that the ingestion of sucralose may have similar health risks as ingestion of chlorinated pesticides. Pre-approval research has shown that sucralose causes shrinkage of the thymus gland of up to 40%, as well as swelling of the kidneys and liver. There has been no studies done on long term use as of yet, but these pre approval findings suggest that long term use may be quite detrimental to health.

Sorbitol, malitol and xylitol are all naturally occurring carbohydrates called sugar alcohols. Coincidentally, sorbitol is found in stone fruits. The body can only partially digest them thus they only contribute a small amount of calories per weight (some studies suggest up to 50%). These sweeteners seem to have less health risks associated with them. In high dosages they have been shown to cause bloating and diarrhea. This is undoubtedly due to their ability to absorb large amounts of water. What this means is that when used in small amounts in products like chewing gums and toothpastes, these products are most likely safe for human consumption, but as a replacement for sugar in the diet as a whole they may create some problems. Interestingly enough, xylitol has been shown to discourage tooth decay. It does this by attracting bacteria (due to its chemical similarity to sugar) and then starving them (because it doesn't break down the same way).

Aspartame which is sold under the brand names Equal and NutraSweet was developed in 1981. It is a combination of aspartic acid, methanol and an ester of the amino acid phenylalanine. Methanol is known to be poisonous, because it quickly breaks down into formaldehyde when heated to high temperatures (like when used in coffee and tea). The ester of phenylalanine in aspartame competes with tryptophan for absorption in the body. Tryptophan is necessary for the production of serotonin, the feel good chemical in the brain. Without proper levels of serotonin depression and apathy will eventually follow. Aspartame can also cause headaches, dizziness, muscle spasms, seizures, nausea, and cramps. Respiratory disorders seem to be especially aggravated by aspartame. The FDA and aspartame manufacturers argue that phenylalanine is naturally present in the body, which is true, but the natural levels of this amino acid, are much lower than the levels reached by users of aspartame. In fact even at mild levels of ingestion aspartame seems to affect the brain in a similar fashion to other excitotoxins like MSG. Long term use of excitotoxins can lead to many neurological disorders such as Alzheimer's Parkinson's, lupus, brain lesions, and tumors.

Another popular sweetener is saccharin, which is sold under the brand name Sweet n Low. Saccharin is about as artificial as a food can get. It is made from petroleum.



It tastes 300 times sweeter than sugar, but is indigestible by the body, therefore has no caloric value. In the early 1980's the FDA came very close to banning the use of saccharin after a studies suggested a link between it and bladder tumors in rats. The suggested ban was met with strong public opposition, especially from diabetics who used saccharin to replace sugar in their diets. It is still unclear if saccharin is safe for human consumption. However it has been shown to cause a number of adverse reactions in young children and infants, including irritability, eczema, insomnia, nausea and wheezing. These reactions are worse in children with sulfa allergies.

Sucralose, which is sold under the brand name Splenda is a chlorinated sucrose derivative. Basically it is sucrose with a chlorine atom attached to it. The major problem with this stems from the fact that this is almost identical to chlorinated pesticides. Research has not proved this yet, but it may be the case

Probably the best option for replacing sugar in one's diet is stevia. Stevia is a South American plant that reacts with sugars and increases their sweetness by 50 - 300 times. It does this without affecting blood sugar levels. Most stevia is sold as an extract in the vitamin section of natural foods stores. The FDA has only allowed it to be sold as a dietary supplement. Some sources believe this is partly due to pressure from companies that produce other artificial sweeteners. Regardless, no harmful side effects have been found to be associated with the use of stevia. The only drawback to stevia use is that it has a slightly "green" aftertaste when used in large amounts. Stevia seems to work best when combined with small amounts of real sugars. An example of this might be adding a pinch of sugar to one's tea and then a few drops of stevia. It will be very sweet.



In the end, the best answer is probably the one that people don't want to hear. Consuming large amounts of sugar is hard on the body and most substitutes are harmful as well. Stevia seems to be safe, but as mentioned doesn't work well in many applications. Most people can tolerate small amounts of real sugars especially whole food varieties like agave nectar, maple syrup and rapadura. The body does use sugar for energy, and when supplied in moderate amounts along with the micronutrients necessary to metabolize it, sugar can be enjoyed from time to time. For more information on how to satisfy ones sweet tooth with intelligence, contact The Educated Vegetable.