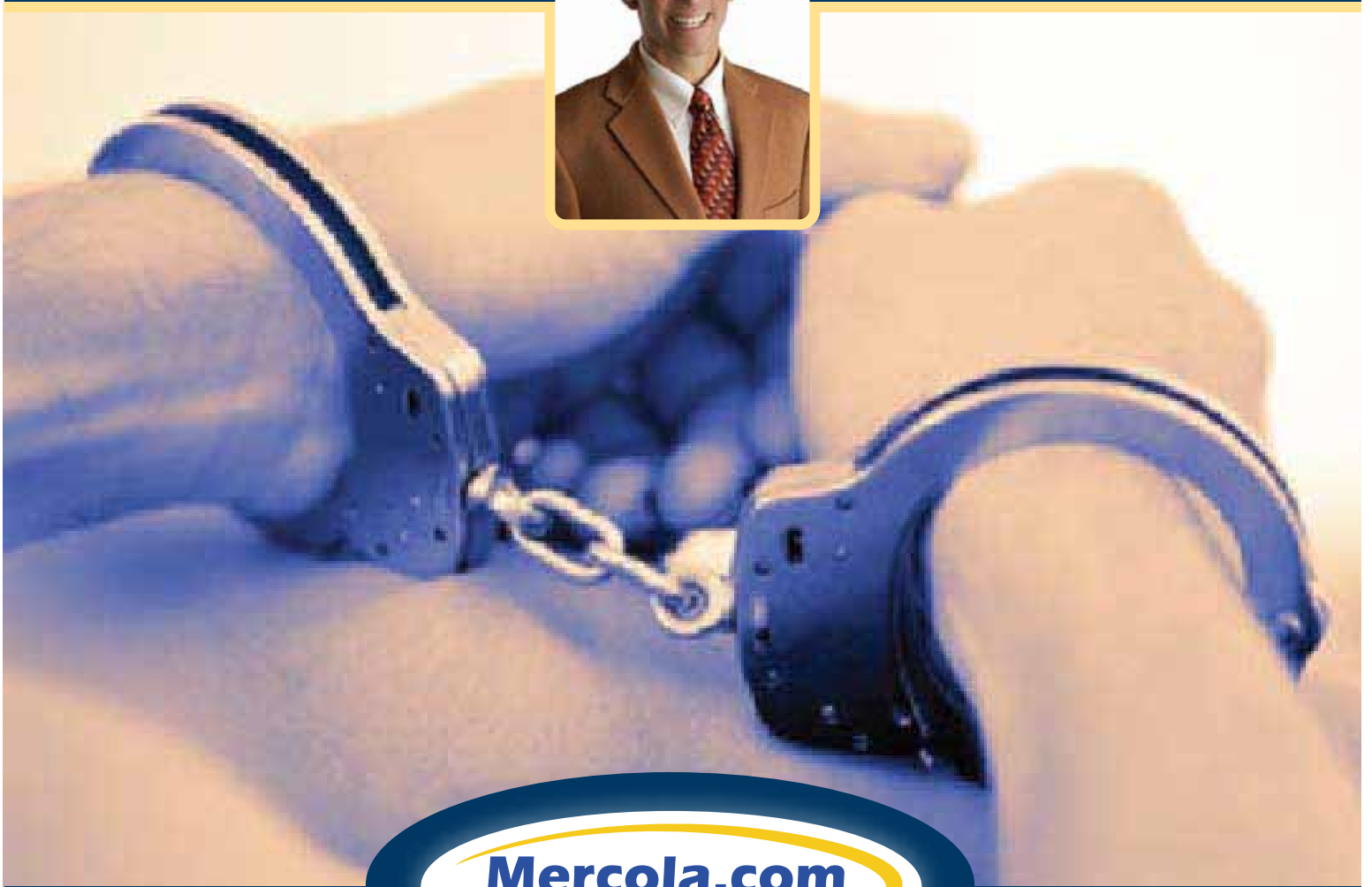


Discover the Truth About the Natural and SAFE Alternative to Sugar the FDA and Big Business Don't Want You to Know About

Stevia: A Tale of Greed, Profit and Deceit

DR. MERCOLA



Mercola.com
Take Control of Your Health

Mercola.com is the world's #1-ranked natural health website, with over one million subscribers to its free newsletter. Millions of people visit www.Mercola.com each day to search for proven and practical solutions to their health and wellness concerns.

As you know, I feel strongly that there is entirely too much sugar in the typical American diet. Sugar is found in almost everything we consume. I can't think of a bigger obstacle we face in our pursuit of a healthy diet.

It is a proven fact—sugar increases insulin levels. And elevated insulin has been shown to lead to high blood pressure, high cholesterol, heart disease, diabetes, weight gain, and even premature aging.

But if you are one of the over 150 million Americans turning to artificial sweeteners in an attempt to rid sugar from your diet, then I urge you to read this vital health report carefully.

Later, I will outline some startling facts about many of today's most popular artificial sweeteners (and why I feel it's important to avoid them at all costs).

My advice to you—if **you want to take one giant step towards improving your overall health, eliminating sugar and its low calorie chemical substitutes from your diet is it.** But for most people, going cold turkey with sugar and artificial sweeteners is one very difficult goal to achieve.

WHY USE STEVIA?



Consider these key health advantages to using stevia in place of sugar and artificial sweeteners:

- Stevia is a natural, virtually calorie-free herb
- Unlike sugar, stevia won't cause a spike in blood glucose levels
- Stevia is natural—and has NOT been linked to the dangers associated with artificial sweeteners
- Stevia has been used medicinally 1,500 years in South America with no reported ill side effects
- Stevia tastes extremely sweet (up to 250 times sweeter than sugar!)—meaning a very little goes a long way

Fortunately, there are natural alternatives to choose from when trying to eliminate sugar and chemical sweeteners. *Raw* honey is one of my favorites. Raw honey is unprocessed and likely to promote health—as long as it is used in moderation and you do not suffer from the following signs of elevated insulin:

- Overweight
- High blood pressure
- High blood cholesterol
- Diabetes

If you have elevated insulin, or if you want to avoid the sugar content in raw honey, there's another natural alternative I recommend you try.

Stevia (pronounced STEE-vee-uh) is natural, noncaloric, has little effect on blood sugar levels, and many researchers conclude it to be SAFE!¹⁻³

Although this may sound too good to be true, I can assure you that stevia is for real. And despite the fact that it's been widely used throughout the world for over a thousand years, it's still largely unknown in America.

That's because stevia, which is extracted from an incredibly sweet tasting herb from South America called *Stevia rebaudiana*, has been the subject of an aggressive campaign by the Food and Drug Administration to keep it from American consumers.

STEVIA: THE BEST KEPT NATURAL HEALTH SECRET IN THE WESTERN WORLD

Heralded by many as the sweetener of the future, stevia is finally starting to gain recognition as a **natural noncaloric alternative to artificial sweeteners**.

The indigenous people of Paraguay and other South American countries have used stevia as a remedy for diabetes and gum disease for over 1,500 years. Research studies⁴⁻⁷ have cited stevia for its ability to:

- Manage blood sugar levels
- Regulate blood pressure
- Promote healthy weight

Researchers at the Hiroshima University School of Dentistry and Purdue University's Dental Research Group have studied stevia and found that it helps to retard plaque on teeth and helps to deter the bacterial growth that causes cavities.

Stevia is also used topically to help soothe scrapes, accelerate healing and reduce scarring.

These are just some of the reasons why I think stevia is one of your best bets for an acceptable alternative to sugar and artificial sweeteners.

Let's take a closer look at stevia by examining how it stacks up against the competition...

STEVIA: YOUR NATURAL BEAUTY SECRET!



Whole leaf stevia extract can be applied as a facial mask by smoothing the dark liquid over the entire face, allowing it to dry, then rinsing. The extract is used to promote tightening of the skin, and help discourage blemishes and acne.

Some claim adding stevia concentrate to your favorite shampoo can add luster to your hair and rejuvenate your scalp!

How Stevia Stacks Up to Sugar & Artificial Sweeteners

Per 2 Teaspoons of Sugar	Stevia	Sugar	Nutrasweet (Aspartame)	Splenda (Sucralose)	Sweet 'N Low (Saccharin)
Natural vs. Artificial	Natural	Natural	Artificial	Artificial	Artificial
Calories	0	32	0	0	0
Net Carbs	0	8g	1g	1g	1g
Glycemic Index	0	70	0	0	0

(Above table from Stevia.com)

When it comes to carbohydrates and calories, the above table shows some clear advantages to using stevia in place of sugar. **Most importantly, the glycemic index above shows that stevia won't cause the same sharp rise in glucose levels that typically results from sugar.**

But when it comes to artificial sweeteners, at a glance, it appears the only advantage stevia offers is one gram of carbs. *And if I believed for one minute that truly was the case, I would not have taken the time to create this important health report.*

What this chart doesn't point out are the many health concerns that are associated with artificial sweeteners. Unfortunately most people who consume artificial sweeteners know very little about them.

If you have used artificial sweeteners in the past, or are using them now, I urge you to consider the information below. It will help you better understand just what it is you are putting in your body.

ARTIFICIAL SWEETENERS: A DIETER'S DREAM OR TOXIC NIGHTMARE?

Chemical alternatives to sugar—like aspartame (NutraSweet or Equal) and sucralose (Splenda)—have become staples in the American diet.

Today, more food manufacturers are using artificial sweeteners in their products than ever before. And if you don't know what names to look for on the label, you may not be aware that some of the products you regularly consume contain artificial sweeteners.

Here's one rule of thumb to follow: if it says sugar-free, than look closely at the label.

According to market analyst Mintel's Global New Products Database (GNPD), some 3,920 products containing artificial sweeteners were launched in the US between 2000 and 2005. And, according to another market analyst, Freedonia, the US artificial sweetener market is set to grow to \$189 million by 2008.

Here is a just a sliver of the popular products using artificial sweeteners today:

- Diet sodas— Diet Coke, Diet Pepsi
- Drink Mixes— Crystal Light, Lipton Iced Tea
- Yogurts— Dannon Light n' Fit Smoothies, Yoplait Light,
- Cereal— Kellogg's All Bran Cereal
- Juices— Ocean Spray, Mott's Plus Light
- Snack foods— Sugar Free Jell-O Gelatin and Pudding, Snackwell's Cookies, Hershey's Sugar Free Chocolate

One artificial sweetener, aspartame, has been gaining widespread attention from the health community and some consumer groups over recent years due to its association with a host of ailments. Below are some startling facts to digest:

- Aspartame accounts for over 75 percent of the adverse reactions to food additives reported to the FDA. Reactions range from headaches and nausea to seizures and death as disclosed in a February 1994 Department of Health and Human Services report.⁸
- According to some researchers and physicians studying aspartame, the following chronic illnesses may be triggered or worsened by ingesting aspartame:⁹ brain tumors, multiple sclerosis, epilepsy, chronic fatigue syndrome, Parkinson's disease, Alzheimer's, lymphoma, birth defects, fibromyalgia, and diabetes.

Aspartame is metabolized to several products, including the amino acid phenylalanine. That's why it carries a particular risk for people with the genetic metabolic disorder called phenylketonuria (PKU).

But the controversy over artificial sweeteners does not end with Aspartame.

RENOWNED NEUROSCIENTIST WEIGHS IN ON ASPARTAME



According to Dr Russell L. Blaylock, a professor of Neurosurgery at the Medical University of Mississippi, the effect of aspartame's breakdown components on brain function is central to its known adverse effects.

Aspartame is what is known as an 'excitotoxin'—a chemical transmitter that allows brain cells to communicate.

Blaylock has written a book about them, "*Excitotoxins: The Taste That Kills*," and says: "Even a minute over-concentration of these chemicals causes the brain cells to become so over-excited that they very quickly burn themselves out and die."

While aspartame manufacturers say aspartame cannot penetrate the blood-brain barrier—the tightly-walled membrane that keeps toxins from reaching the brain—Blaylock counters that a number of factors make the blood-brain barrier more porous, including exposure to

pesticides, hypoglycemia, all immune diseases (such as lupus and diabetes), Alzheimer's and Parkinson's, strokes (including silent strokes) and a whole range of medical drugs.

Under these conditions, ingesting aspartame-laced foods may cause a spike in the level of excitotoxins that directly reach the brain, thus increasing the likelihood of adverse effects.

Above excerpt taken from September 2005 issue of *The Ecologist*
Volume 35, No.7

SUCRALOSE: TRADING CALORIES FOR CANCER

Sucralose, the #1 selling artificial sweetener for the past several years, belongs to a class of chemicals called organochlorines, many of which are known to be carcinogens.¹⁰

Splenda (sucralose), which claims to “taste like sugar because it’s made from sugar,” may indeed start off as sugar, but what comes out of the factory is far from natural.

Splenda is made from a multi-step process that replaces three hydrogen-oxygen groups on the sugar molecule with three chlorine atoms. As a result of this “unique” biochemical make-up, McNeil Nutritionals, the makers of Splenda, claim that it is not digested by the body, therefore it has zero calories.

But there's more to Splenda's story that concerns me...specifically **the lack of studies covering the long-term effects of sucralose consumption on humans.**

Research published in the *Journal of Food and Chemical Toxicology* concluded,

“Based on the studies and the extensive animal safety database, there is no indication that adverse effects on human health would occur from frequent or long-term exposure to sucralose at the maximum anticipated levels of intake.”

While this study was good enough for the FDA to approve sucralose, a study in *New Scientist* (Nov 23, 1991) determined that the size of thymus glands in rats fed a diet rich in sucralose was reduced by 40%, **suggesting that sucralose has the potential to compromise the immune system.**

Despite this and other harmful findings in animal studies, there is still no ongoing research to determine the effects of sucralose in humans. In fact, I would bet that I have more people on my website reporting adverse reactions to Splenda than were ever formally studied in the research submitted for FDA approval.

For the complete story about artificial sweeteners, I highly recommend that you read my new book, **Sweet Deception: Why Splenda®, Nutrasweet®, and the FDA May Be Hazardous to Your Health.**

Sweet Deception reads as compellingly as a good novel. It's been meticulously researched and hinges on in-depth investigative journalism, so you get the facts about artificial sweeteners—not hearsay.

With your help, I hope to spread the word about the deception surrounding the artificial sweetener industry, and help make stevia (one of the few alternatives to sugar that I can recommend as SAFE) a household name.

STEVIA: CENTURIES OF USE DEMONSTRATE SAFETY OF NATURAL SUGAR ALTERNATIVE

As mentioned previously, the stevia plant has been used as a natural and traditional remedy for 1,500 years by the people of South America. The main producers of stevia are Japan, China, Taiwan, Thailand, Korea, Brazil, Malaysia and Paraguay.

Stevia has been included in soft drinks, ice cream, cookies, pickles, chewing gum, tea and skin care products. In Japan, about 40% of the sweetener market is estimated to be stevia-based.

Hundreds of tons of stevia extracts have been consumed annually in Japan for almost thirty years, with no reported side effects. **Since the 1970's, the Japanese have conducted extensive research on stevia, and have found it to be completely safe.**¹¹⁻¹³

Nonetheless, in light of a mountain of evidence to the contrary, the U.S., Canadian and the EU governments, have all continued to deny stevia acceptance as a safe food.

I think it's high time to consider a more obvious and plausible reason for stevia's snub... **stevia is a casualty of the FDA's buckling to the interests of big business.**

TESTS CONFIRM STEVIA IS SAFE:

Dr. Daniel Mowrey, who holds a doctorate in phytopharmacology and has studied stevia extensively, recently had this to say about its safety:

More elaborate safety tests [than had been done previously] were performed by the Japanese during their evaluation of stevia as a possible sweetening agent. Few substances have ever yielded such consistently negative results in toxicity trials as have stevia. Almost every toxicity test imaginable has been performed on stevia extract (concentrate) or stevioside at one time or another. The results are always negative. No abnormalities in weight change, food intake, cell or membrane characteristics, enzyme and substrate utilization, or chromosome characteristics. No cancer, no birth defects, no acute and no chronic untoward effects. Nothing.¹⁴



FDA BLACKBALLS STEVIA...BUT NOT FOR THE REASONS YOU MIGHT THINK

The FDA has turned down three industry requests to use stevia in foods in the **U.S. Why does the U.S. shun stevia? One conclusion I've made is because it's natural.**

As a natural product, stevia cannot be patented. Because it has no patent protections that allow exclusive rights to selling it, stevia's appeal is limited to chemical corporate interests looking for their next cash cow.

Making a natural non-caloric alternative to sugar widely available could potentially be devastating to the profits of the artificial sweetener industry. And after years of dedicated research on this subject, I am convinced that's why stevia's competitors are spending lots of money to keep it from being approved as a sweetening agent.

To understand the immense power fueling the stevia backlash, you need only to review the list of global chemical giants backing the artificial sweetener industry—a list that includes Pfizer, Monsanto, Johnson & Johnson, Abbot Laboratories, and Hoechst.

The backers of stevia form a much less formidable coalition, and include the American Herbal Products Association (APHA) and the Lipton Tea Company. Thus, stevia has been the subject of searches and seizures, trade complaints, and embargoes on importation.

LAND OF THE FREE OR LAND OF THE FDA...



In the late 1980s, a trade complaint was registered with the FDA, as tea containing stevioside was being sold by Celestial Seasonings, one of the world's largest herbal tea companies. Celestial Seasonings used stevia as a flavoring in many of their teas until 1986, when without warning the FDA raided their warehouse and seized their entire stock of stevia.

The FDA gave no reason for this action. The company was simply informed they could no longer use stevia in their teas.

Supporters of stevia continue to assert that the FDA actions amount to a restraint to trade designed to benefit the artificial sweetener industry.

And after spending two years pouring through stacks of papers and correspondence with the FDA and carefully reviewing thousands of scientific and medical studies on artificial sweeteners for my new book, ***Sweet Deception, I found evidence that incriminates the FDA as a supporter of corporate greed.***

Below you'll find information from my book that outlines the potential dangers of artificial sweeteners, and the FDA's response to them, so you can decide for yourself.

- **Saccharin and Cyclamate:** Animal studies show both cause cancer. But both were created early enough to be GRAS (Generally Regarded as Safe). After, a National Cancer Institute study found that heavy use of blended cyclamate and saccharin was associated with a higher incidence of bladder cancer, the FDA put a warning label on Saccharin, and Cyclamate was banned. But Saccharin's warning label has been removed and the FDA is considering Cyclamate for re-approval.
- **Aspartame:** Animal studies suggest aspartame is toxic to the nervous system. It was shown to cause damage to the brains of infant mice. Approved by the FDA, with a warning label required for those with PKU.
- **Sucralose:** Pre-approval data showed evidence for anti-fertility effects, immune system toxicity, potential mutagenic activity, and fetal edema in offspring. Approved by the FDA.

- **Acesulfame-K:** Animal studies suggest it may cause cancer and breakdown products shown to be toxic to the thyroid gland. Approved by the FDA.
- **Neotame:** Aspartame plus 3-di-methylbutyl, which can be found on the EPA's list of most hazardous chemicals. Approved by the FDA.

While the FDA remains firm in its ruling that natural stevia is unsafe until proven otherwise, one could argue that its actions set the precedent that the chemical compounds that make up the artificial sweeteners are generally viewed as safe until testing suggests otherwise.

Through a bizarre twist in reasoning, the FDA has ruled that stevia is guilty until proven innocent, and artificial sweeteners are innocent until proven guilty.

COINCIDENCE OR CONSPIRACY?

Prior to the 1980's, stevia was on the FDA's GRAS (Generally Regarded as Safe) list. It was removed from that list at roughly the same time aspartame entered the scene. Until 1995, when the passage of the Dietary Supplement, Health and Education Act (DSHEA) was passed, there was an "important alert" that in effect blocked all stevia from entering the country. Here's where stevia stands in the U.S today:



- Stevia can be sold legally in the United States as a dietary supplement
- Although found in many forms, it must be sold by itself, not incorporated into any product.
- It must be labeled as a dietary supplement
- Stevia cannot be called a sweetener or even referred to as sweet—to do so would violate FDA regulations and the product could be subject to seizure

STEVIOSIDE VS REBAUDIOSIDES: WHAT TO LOOK FOR BEFORE YOU BUY

When compared to sugar and artificial sweeteners, some people may think stevia is expensive. It's true, you'll pay a more for stevia. But are you willing to put a price on your health?

Stevia is a plant that requires careful cultivation before it can be used as a sweetener. Stevia also requires large capital investments to buy plants, farms, and equipment, to grow and harvest the plants and an even larger investment to retrieve premium stevia from overseas. After adding in these expenses, you are left with a hefty price tag.

Unlike sugar, stevia is not widely cultivated. Sugar is also expensive to grow and process but with hundreds of countries growing and processing sugar, economics plays a major factor in lowering the price.

Sweetener Cost Comparison*

Sweetener	Cost	Sweetener	Cost
Lo Han Kuo	\$2.80/oz.	Date Sugar	\$0.37/oz.
Stevia	\$2.60/oz.	Barley Malt	\$0.28/oz.
Net Carbs	0	8g	1g
Glycemic Index	0	70	0
Equal®	\$1.14/oz.	Brown Rice Syrup (organic)	\$0.23/oz.
Splenda®	\$0.91/oz.	Sucanat®	\$0.19/oz.
Agave Syrup	\$0.81/oz.	Molasses	\$0.18/oz.
Raw Honey	\$0.75/oz.	Fruit Juice Concentrate	\$0.17/oz.
Maple Syrup (organic)	\$0.75/oz.	Turbinado	\$0.16/oz.
Xylitol	\$0.50/oz.	Fructose	\$0.12/oz.
Sweet’N Low®	\$0.50/oz.	Sucrose (Table Sugar)	\$0.03/oz.

*Above table is courtesy of *Sweet Deception: Why Splenda®, Nutrasweet®, and the FDA May Be Hazardous to Your Health*

It should come as no surprise that chemical sweeteners—which are for the most part nothing but a blend of cheap toxic chemicals—cost very little to produce, making them a highly profitable industry. The chart below illustrates a general cost comparison for various sweeteners.

Keep in mind that some of the more expensive sweeteners listed above are much sweeter than the others, so you will require much less of it. This is especially the case with stevia and Lo Han Kuo.

When you think about how stevia can be a useful tool in your goal to achieve optimal health, if you are like me, the few pennies you pay extra for it seem negligible.

However, because the marketplace is unregulated, you have to be careful about which types of stevia you choose to ensure you are getting the safest, purest (and most useful) form.

Always look for a high rebaudioside A content, as opposed to stevioside. The stevioside ratio in leaves is more than double that of rebaudioside A, making stevioside more plentiful, economical and most commonly used.

While there is an aftertaste to stevioside, that aftertaste is almost non-detectable in rebaudioside A—the sweetest part of the leaf that makes up only about 3% of the glycosides within a stevia leaf.

The U.S. is flooded with stevia powders and liquids with a high stevioside content, so be sure to check your label before checking out.

But don't hold your breath looking for a stevia product with 100% rebaudioside A. That would require a great deal of enzyme modification plus much more raw material. It is simply too cost prohibitive from a consumer standpoint. Instead, I recommend you set your sites on stevia with a rebaudioside content of 70% or higher.

If you happen to run across a stevia product that is very cheap, I'd advise you to look beyond the price—and consider the stevioside/rebaudioside content and the method of processing. I've found the cheaper stevia products to be low quality with an extremely bitter taste.

HELPFUL TIPS AND TRICKS FOR REPLACING SUGAR WITH STEVIA

Estimated to be 200-300 times sweeter than sugar, a little stevia goes a long way. In fact, just a pinch will provide the same sweetening power of a teaspoon of sugar.

Now available in powder and in liquid concentrate, stevia has never been more versatile.

Which form should you choose? Well, that depends largely on how you want to use it and your personal preferences.

Some people do not like the taste of stevia, and complain of an aftertaste.

However, I like using stevia in salad dressings, and as a beverage sweetener. With the appropriate adjustments, it is even possible to bake with stevia, although its lack of bulk compared to sugar can make this a tricky endeavor.

Expect some trial and error when substituting stevia into your favorite recipes.

SAY YES TO DESSERT WITH STEVIA!

Try stevia in some of your favorite baking recipes and enjoy guilt-free pleasures! Here are some important cooking tips to remember when using stevia:



- Stevia is best used under baking temperatures of 350 degree Fahrenheit.
- Because stevia contains no sugar, it cannot be used effectively in yeast breads, as they require sugar in some form to activate the yeast
- Stevia won't caramelize, so it can't be used for meringues
- Baked goods containing stevia do not brown in the same manner as conventionally sweetened cookies, muffins, and other baked foods. To judge doneness, stick a toothpick into the center to determine if the food is sufficiently dry.

Using stevia may take a little practice, but there are many cookbooks to help you along the way. A resource that I routinely consult for using stevia, and recommend to you is *The Stevia Cookbook*, by Donna Gates and Dr. Ray Sahelian.

With Over 100 stevia recipes, *The Stevia Cookbook* offers a complete variety of dishes from breakfast and dinner fare to appetizers and desserts. Also included are detailed instructions that will help eliminate the guesswork.

As the stevia controversy continues to unfold, you can be sure to find updates on Mercola.com. In the meantime, for further stevia information, I recommend visiting stevia.net and steviacanada.com.

REFERENCES

1. Department of Health and Human Services, Report on All Adverse Reactions in the Adverse Reaction Monitoring System, (February 25 and 28, 1994).
2. Compiled by researchers, physicians, and artificial sweetener experts for Mission Possible, a group dedicated to warning consumers about aspartame.
3. *Excitotoxins: The Taste That Kills*, by Russell L. Blaylock, M.D.

4. Kozlovsky, A., et al. "Effects of Diets High in Simple Sugars on Urinary Chromium Losses." *Metabolism* 35 (June 1986): 515-518.
5. Fields, M., et al. "Effect of Copper Deficiency on Metabolism and Mortality in Rats Fed Sucrose or Starch Diets." *Journal of Clinical Nutrition* 113 (1983):1335-1345.
6. Lemann, J. "Evidence that Glucose Ingestion Inhibits Net Renal Tubular Reabsorption of Calcium and Magnesium." *Journal of Clinical Nutrition* 70 (1976): 236-245.
7. Goldman, J., et al. "Behavioral Effects of Sucrose on Preschool Children." *Journal of Abnormal Child Psychology* Vol. 14, No. 4 (1986): 565-577.
8. Department of Health and Human Services, Report on All Adverse Reactions in the Adverse Reaction Monitoring System, (February 25 and 28, 1994).
9. Woodrow C. Monte, Ph.D., R.D., "Aspartame: Methanol and the Public Health," *Journal of Applied Nutrition*, 36 (1): 42-53.
10. Daniel JW, Renwick AG, Roberts A, Sims J. The metabolic fate of sucralose in rats. *Food Chem Tox.* 2000;38(S2): S115-S121.
11. Jones, T.W., et al. "Enhanced Adrenomedullary Response and Increased Susceptibility to Neuroglycopenia: Mechanisms Underlying the Adverse Effect of Sugar Ingestion in Children." *Journal of Pediatrics* 126 (Feb 1995): 171-7.
12. Scanto, S. and Yudkin, J. "The Effect of Dietary Sucrose on Blood Lipids, Serum Insulin, Platelet Adhesiveness and Body Weight in Human Volunteers." *Postgraduate Medicine Journal* 45 (1969): 602-607.
13. Albrink, M. and Ullrich I.H. "Interaction of Dietary Sucrose and Fiber on Serum Lipids in Healthy Young Men Fed High Carbohydrate Diets." *American Journal of Clinical Nutrition* 43 (1986): 419-428. Pamplona, R., et al. "Mechanisms of Glycation in Atherogenesis." *Med Hypotheses* Vol. 40, No. 3 (Mar 1993): 174-81.
14. Takahashi, E. Tohoku University School of Medicine, *Wholistic Health Digest* (October 1982): 41:00