NATURAL HEALTH

DID YOU KNOW....?

Nutrition is a deeply confusing topic.
Joe Schwarcz, PhD is hoping to change that ...An Apple a Day: The Myths, Misconceptions and Truths About the Foods We Eat, is a comprehensive and refreshingly evenhanded look at what we know, what we think we know, what we don't know and how we can apply what we do know to our nutritional choices. Instead of giving dietary plans, Schwarcz teaches us how to think about nutrition and does so in a thoughtful, humorous and engaging manner.

The book is broken down into 4 parts:
1. Naturally occurring substances in our food supply
2. Manipulating our food Supply
3. Contaminants in our food supply
4. Tough to swallow (a look at fads and shaky science)

Here are some nuggets from the first part of the book;
'It is folly to think that one can introduce something as complicated as food into something as complex as the human body and make easy predictions about the outcome." - Joe Schwarcz

- "Toxic chemical" is a meaningless term unless placed in its proper context. Apples contain acetone, isopropanol and cyanide. It's the dose that counts.

- Polyphenol content in the diet is inversely associated with death from heart disease. Major sources in the diet are apples, tea and onions. The real key to antioxidant intake is variety

- An Italian study showed that higher pizza consumption was associated with lower risk of heart attacks. The tomato sauce

appeared to be the link. After studying tomato products and lycopene, it appears that it is processed tomatoes that are responsible for the health effects - not the lycopene itself.

- Cranberries help ward off urinary tract infections however it is not due to the acidity or anti-bacterial effect. It is the prevention of bacteria sticking to the lining of the urinary tract - which is thought to be because of the trimeric procyanidins.

- Blueberries have powerful antioxidant effects - possibly due to the anthocyanins and pterostilbenes found in the little blue wonders. A study showed that young rats could balance on a narrow beam for 13 seconds. When the rats reached old age, it dropped to 5 seconds. The old rats fed blueberry extract, however were able to stay on an average of 11 seconds.

- Compounds found in orange peels (polymethoxylated flavones - PMF's) have been shown to exhibit a powerful cholesterol-lowering effect (the study had only 10 subjects, however). Commercial concoctions are being formulated and tested. These PMF's also exhibit qualities similar to tamoxifen - an anti-cancer drug. More research needed.

- Acai berries - turned into expensive commercial juices, claim to have more antioxidants than any other fruit. What matters though, is total antioxidant intake and this appears to be best served by consuming a variety of fruits and vegetables. Antioxidant capacity is tested in a lab dish - which may or may not carry over to human benefit.

- There is a strong inverse relationship between fish

consumption and depression - with some countries exhibiting 60 times the amount of depression as others. Ditto with cognitive impairment, ADD, dyslexia and Hyperactivity

- Studies on fish consumption and heart health have been very promising and yet surprisingly mixed. 2-3 servings of fatty, cold water fish (salmon, sardines, herring and mackerel) is a good idea. Enough to induce benefits and not enough to worry about mercury and PCB's

- Flaxseeds contain lignans, which have been shown to lower breast cancer risk. Flax also binds to bile acids in the gut - forcing them to make more. Diabetics have experienced a 30% drop in blood glucose with 50g of flaxseeds.

- Olive oil contains oleocanthol, an anti-inflammatory substance with pharmacological activity similar to that of ibuprofen. Phenols found in extra virgin olive oil reduce the damage to DNA in colorectal cells.

- In addition to fiber, whole grains contain vitamins, mineral and antioxidants. They also provide lignans (anti-cancer effects) and rutin - which can reduce the risk of blood clots.

- Beta-glucan found in oats prevents cholesterol from being oxidized, lowers blood pressure and helps control blood sugar levels

- In the Nurses Health Study, women who consumed beans and lentils twice per week were about 25% less likely to develop breast cancer than those who ate them less than once a month. This may be due to the inositol pentakisphosphate

found in beans, lentils, peas, wheat bran and nuts that has an effect similar to the drug cisplatin - a drug commonly used to treat ovarian cancer

- Look for gas-free beans in the grocery stores soon. Adding lactobacillus species before cooking can reduce gasproducing carbohydrates by 90% without altering nutritional value.

- Breast cancer rates in the former East Germany were much lower than those in West Germany. The possible difference? Cabbage consumption was much higher in East Germany.

- Higher intakes of foods rich in lutein and zeaxanthin such as spinach, corn and collard greens are associated with a substantially lowered risk of macular degeneration

- Turmeric, the yellow spice used to add flavour to dishes has a powerful anti-inflammatory effect. More specifically, curcumin - a component of turmeric inhibits the action of cyclooxygenase-2 enzyme (COX-2) which catalyzes inflammation

- Curcumin may also be effective in preventing colon cancer
- The Health Professionals Follow-up study (45,000 men) found that total coffee intake was not associated with heart disease or stroke even when consumption exceeded 4 cups per day. Coffee consumption appears to decrease the risk of Parkinson's disease and type II diabetes

- Resveratrol found in red wine has been shown to simulate the positive effects associated with reducing calories by 30%. French paradox? Mais Non! They eat less than Americans do.

Comparisons of restaurants have shown that American restaurants portions are 25-72% larger than that of comparable French restaurants. American candy bars are 41% larger and hot dogs are 63% larger. The average French person takes longer to eat meals. The average American spends an hour eating per day while the average French spends 100 minutes.

- Celiac disease (gluten allergy) is strongly associated with non-Hodgkin's lymphoma and is much more common than we may think.

- Cinnamon has been shown to reduce blood sugar levels by as much as 30% - with only a quarter tablespoon a day. In this study, it also lowered LDL cholesterol and triglycerides

- Homocysteine appears to signal the approach of heart disease, but doesn't cause it. Levels can be lowered with folic acid, vitamin B-6 and vitamin B-12 - but this didn't effect heart disease when put through clinical trials. Lowering homocysteine does however appear to lower risk of colon cancer and Alzheimer's disease but appears not to have an effect on cognitive performance in the elderly. Uncooked spinach is a great source of folate

- While high doses of vitamin E don't appear to reduce the risk of heart disease or cancer but it appears to ward off Parkinson's disease and cold sores.

- Vitamin D offers significant protection from breast cancer. Doses need to be at about 1000 IU's for protection - supplementing is usually necessary to achieve this. Subjects from a multitude of studies who took vitamin D were less

likely to die of ANY cause than those who did not (by 7%).
Other heated topics discussed in the book:

- Milk and whether or not it does the body good
- Why the fear of MSG and artificial sweeteners and is largely irrational
- The science and technology behind artificial colours and flavours and whether or not we need to worry about them
- An in depth look at food preservation techniques and which ones we need to be concerned about
- A look at food fortification and its impact on our health
- A look at possible food contaminants and substances in our foods (dioxins, PCB's, antibiotics, hormones)
- The truth behind claims of super juices, supplements, Kosher foods and detox diets

For me it is nice to know there are books available that teach people how to think about nutrition and food amongst the countless that prescribe diets and preach single-minded messages. An Apple a Day is a very scintillating read for those interested in digging a little deeper into the complex interplay between food and health. It is rich with science, straightforwardness and impartiality and manages to boil down complex topics into easy-to-understand take home messages.
If you're interested in the bottom-line, user-friendly guidelines and black-and-white suggestions, you may find the book a little too drawn out. On the other hand, if you are looking to expand your basic understanding of nutrition and navigate through food controversies, I think this book is of good value.

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Diet & Optimum Nutrition

Top 10 Food Myths and Facts

Have you heard the one about the fat-forming carbohydrate? Food & Nutrition is continually
faced with the challenge of dispelling common myths about calories and weight management
ten such myths have been covered below:

Myth: Eating most of your calories in the evening promotes weight
Fact: No matter when you eat them, you gain weight when you eat more calories
burn off. However, mindless munching in front of the TV at night can push calorie intake the top.

Myth: Fat free is calorie
Fact: Some people indulge in extra-large servings of fat-free foods, such as cookies, cakes crackers, without realizing that these foods may contain the same amount or even calories than regular versions. Get the facts on fat-free foods by checking food labels serving size and number of calories per serving. Fruits and vegetables are naturally low
and calories. However, other low fat or no fat foods may contain a lot of calories. To make such foods taste extra sugar, flour, or starch thickeners are usually These ingredients are high in calories and may lead to gain.

Myth: Carbohydrates (or sugars) cause weight
Fact: Carbohydrates do not cause weight gain unless they contribute to excess calorie The same holds true for protein and fat. Findings from the National Weight Control Registry
show that people who successfully maintain weight loss tend to eat diets that are higher carbohydrates and lower in fat, in addition to watching their total calorie intake. However, people who eat a diet that is extremely high in carbohydrates and low in protein and hungry sooner, which may trigger overeating.

Myth: High-protein diets cause ketosis, which reduces hunger.

Fact: Ketosis occurs when fat is used as an energy source instead of carbohydrate during high-protein diet. Ketone bodies are produced, which turn your breath a bad “fruity” Ketone bodies do not reduce appetite, however, eating sufficient protein for your body
help reduce hunger and support weight These diets may help you lose weight fast – but most of this weight that you lose constitute water weight and lean muscle weight instead of fat. The best way to lose weight keep it off without harming your body is by following a reduced-calorie diet that balanced between carbohydrates, proteins, and fats.

Myth: Yoghurt is the perfect diet food. Many dieters swear by it, but some yoghurt can
fattening as ice cream. Greek yoghurt has 10 pc
Fact: Yoghurt is good for people of all ages. Yoghurt is also important for those wanting weight. As a milk product, yoghurt is naturally rich in calcium. Research shows that calcium
helps reduce weight gain. Even changes in the calcium levels of fat cells change signals within the cell that control making and burning of fat. What needs remembered is no one food is going to prove magic, a combination of effective diet and exercise plan that will really work. yoghurt that contains added sugars or sweetened fruit, as these upset delicate chemical balance that allow the cultures to thrive. Sugars also feed the growth unwanted yeasts, so you’re better off without it!

Myth: Exercise makes you eat more. Often people shy away from doing exercise using excuse.
Fact: However, research has shown that after 20 minutes of exercise people ate no more those who had done nothing. The only difference was that those who had exercised thought food tasted better.

Myth: Extra protein makes you strong.
Fact: The body has tremendous reserves and is very adaptive. The idea that
you have to eat specified foods in specified amounts every day to maintain
performance is unsound. You do not need to starve yourself to lose weight.

When we are active, our body uses its own fat and carbohydrate for fuel. A diet
that includes animal and vegetable protein supplies all the body needs to
replenish its stores. There is no superdiet for super performance. Besides, high protein often lack key nutrients found in carbohydrate foods. You need every kind of food. Avoiding kind of food is just as wrong as ingesting food supplements.

Myth: Lettuce makes your figure
Fact: The theory adopted behind this fact is that, you can eat a food with low energy density,
such as lettuce, and consume a huge amount for few calories. This is true to some extent as lettuce leaves practically do not contain calories.
A tablespoon of butter has the same number of calories as 10 cups lettuce. However, generally they are not eaten alone and most lettuce are high in fat.
Research suggests that losing ½ to 2 pounds a week by making healthy food choices, moderate portions, and building physical activity into your daily life is the best way weight and keep it off. By adopting healthy eating and physical activity habits, you may lower your risk for developing type 2 diabetes, heart disease, and high blood pressure.

Myth: You can burn fat by eating certain foods, like grapefruit and cabbage
Fact: The grapefruit require you to eat half a grapefruit before every meal to reap the benefits of the fruit's called fat-burning enzymes. Calories typically are limited to fewer than 800 a day, although
some versions require that you eat until you are full. Grapefruit has no fat, is low in calories
and sodium, and is packed with vitamin C. But the very low calories — and deficits in protein,
fiber and several important vitamins and minerals — can make this diet dangerous. Similarly,
the cabbage soup diet proponents report feeling lightheaded and weak because the diet low in protein, vitamins and complex carbohydrates. You may lose weight, but you'll probably
be too queasy to enjoy it. Remember, no foods can burn fat. Caffeine-rich foods may speed your metabolism rate for a short

time. However, they do not cause any weight loss. The way to lose weight is to reduce the number of calories you eat and increase your physical
activities.

Myth: Processed foods are not as nutritious as fresh
Fact: Many processed foods are just as nutritious or in some cases even more nutritious fresh foods depending on the manner in which they are processed.
Frozen vegetables are usually processed within hours of harvest. There is little nutrient the freezing process so frozen vegetables retain their high vitamin and mineral content. contrast, fresh vegetables are picked and transported to market. It can take days or weeks before they reach the dinner table and vitamins are gradually lost over time no
how carefully the vegetables are transported and Some processed foods, such as breads and breakfast cereals, have vitamins and minerals
added for extra nutrition. In fact, the growing interest in health and nutrition has spurred production of a whole new range of foods with added health and nutritional benefits "functional foods") such as fat spreads with added fibre to lower cholesterol
Processing can also make some nutrients more available. For example, removing phytic from grain foods by removing the bran helps to improve the absorption of iron from Processing tomatoes into a tomato paste or sauce increases the amount of lycopene
antioxidant) that is available to the body.

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Twenty food myths

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Pages:
There exist a lot of bizarre and at times ridiculous views about food. Nutritionist Tatiana Tovbushenko from Barvikha Clinical Sanatorium in the Moscow area, comments on some of them.

1. Bluish milk is diluted with chalk.
In fact, bluish milk is the best as its fat and cholesterol contents are low. Skimmed milk has the lowest fat content– 0.05 %. It has a bluish colour, but definitely it contains no chalk. Such milk has less vitamin A than other

types of milk, but it has as much protein as any.This product has full value and good for those who watch their calories.

2. Milk with a long shelf life contains strong preservatives.

That is not true. The secret lies in the application of high-temperature technologies. Milk is heated to 135C and then quickly cooled. That makes "bad" bacteria perish, but all the vitamins are retained.

3. Boiling water destroys pathogenic micro organisms.

It is not quite so. Boiling does not destroy even micro organisms, let alone heavy metals, pesticides, herbicides, nitrates, phenol or oil products. So, this is not enough for its purification. Besides, beneficial salts of calcium and magnesium settle inside a teapot after boiling.

4. Canned food is not good for health.

In many respects this can be true for canned meat rather than canned fish. Long heat treatment makes even large fish bones soft and edible, thus providing an additional source for calcium intake, which is beneficial for our skeleton. Daily recommendation of calcium is approximately 1,500 .

5. It is unwise to swim within one hour of eating.

This myth dates half a century back when the American Red Cross has published an instruction on life-saving saying that swimming immediately after meal may cause stomach cramps and even death. But later this theory was questioned. Many swimmers assert that they usually cover long distances during training sessions immediately after meal.

6. Lovers lose appetite.

Willi Pasini, professor of psychiatry and psychology at Geneva University, is based on his investigation claiming that lovers, especially men, contrary to the popular notion, tend to have better appetite. Owing to their sentimentality, only one of women in love out of four loses her appetite.

7. Children should eat mushrooms.

Mushrooms are often included in children's diet. However, you shouldn't do that, as children do not generate enzymes needed to process the protein contained in mushrooms. That is why children get food poisoning from eating even small portions of edible mushrooms. The consequences of mushroom poisoning are equally disastrous for children and elderly people.

8. Toxins can be removed from mushrooms after boiling them for several hours.
This is deceptive. In most cases mushroom toxins show very strong resistance to heat treatment.

9. Alcohol helps fight mushroom poisoning.
On the contrary, alcohol aggravates poisoning effects.

10. People with greasy hair shouldn't eat too much fat.
Too much fat is not good in any case. However, even if you consume one litre of olive oil within a day, that will hardly reflect on the structure of your hair.

11. Raw food is better than processed one.
It is not so simple. Some vegetables, for example eggplants and beans contain toxic substances, which become harmless only after heat treatment. Besides, the stomach often can’t digest raw products properly.

12. Lettuce makes your figure slim.
This belief is true to some extent as lettuce leaves practically do not contain calories. However, generally they are not eaten alone and most lettuce sauces are high in fat.

13. Liver is very nutritious.
The liver certainly stores many vitamins, minerals and protein, but it also contains a lot of fat and cholesterol. Furthermore, according to American nutritionists, cattle liver accumulates hazardous quantities of chemicals and hormones animals get from fodder.

14. If food looks and smells naturally, it is safe.
That is not necessarily always true. Some kinds of bacteria that poison our food do not affect their external appearance. So, if you have any doubts, you'd better not risk.

15. Chopping boards made of wood are unhygienic.
That's what manufacturers of plastic chopping boards say. In fact, there is no difference, where hygiene is concerned, between them. What's more, some biologists believe that wood boards are even better.

16. Yoghurt alleviates hangover as it contains alcohol.
As a matter of fact, there is almost no alcohol present in this product. One ripe pear contains as much alcohol as a bucketful of yoghurt.

17. Coffee negatively affects pregnancy.
It has been proved that caffeine does not affect healthy development of

fetus and is unrelated to miscarriage. But according to recent American studies, pregnant women should refrain from coffee as well as from coke or any other drink containing caffeine.

18. Coffee causes a rise in blood pressure.
This statement is disputable. Australian researcher Jack James in his 1998 study showed that three to four cups of coffee taken in the course of the day tend to slightly increase the lower level of blood pressure. However, such a rise in pressure can be caused by an emotional dispute with the your friend or even by the sight of a doctor holding a tonometer and coming up to you. The English doctors say that the "hypertonic" action of coffee is short lived, and does virtually not affect its regular drinkers.

19. Lemons are sour because they lack sugar and rich in vitamin C.
In fact, one kilo of lemons has more sugar than one kilo of strawberries. As for vitamin C, its content in strawberries is higher than in lemons. Lemons are highly valued for many other beneficial substances, or antimicrobic and antiseptic properties rather than for their vitamin C content. For this reason lemons are long since known to have been used against cold, flu, sore throat, inflammatory diseases of the palate.

20. Carrots are extraordinarily beneficial for your eyes.
Carrots contain beta-carotene, which the body converts into vitamin A needed for the function of the eye's retina. However, large quantities of beta-carotene are found in the liver and are easily replenished with various products. Therefore, fears that you'll not get enough vitamin A, which is critical for your vision, appear to be far-fetched.

Don't Fall for These Food Myths!

By Terry Dunkle, Diet Power Editor-in-Chief
I don't know about you, but anytime I hear a generalization repeated more than a dozen times without any citation of evidence, I begin assuming it's false. I started the habit early. Once, as I pawed over a bunch of bananas in my grandmother's kitchen, she said to me for the umpteenth time, "Just one, now. They're hard to digest."
"No they're not," I said, snapping off two. "'Ever seen a sick monkey?"
She swiped at me with her rolled-up copy of the *Grit*, but as usual, I dodged the thing.
Today I know the truth about bananas: They're extraordinarily easy to digest when ripe, but not when they're green—which is why people who eat green bananas always cook them. Green bananas are mostly starch, whose giant molecules must be snipped apart by the digestive system before the body can absorb them. *Ripe* bananas have already predigested their own starches into tiny sugar molecules that pass readily into the bloodstream.
I was going to explode a half-dozen other food myths in this article, but the funny thing is, when I looked into the evidence, I discovered that some of them were actually true.

(Which reminds me of something else Grandma always said: "You learn something new every day.")
Below are six oft-repeated statements about food. You've probably heard most of them. Without peeking at the answers (printed at the end), can you tell which are true?

Fact or Fiction?
1. **Eating a steak dinner can trigger a heart attack.**
2. **Don't feed your dog chocolate—it'll poison him.**
3. **Singer "Mama" Cass Elliot died from choking on a ham sandwich.**
4. **The best Cajun cooks always spit in the food.**
5. **A disgruntled customer has been giving away a company's secret cookie recipe on the Web.**
6. **Manufacturers are putting cancer-causing chemicals in our foods.**

Answers
(Don't peek until you've guessed!)

1. Eating a steak dinner can trigger a heart attack.
True—if you already have a bad heart. Studies of heart-attack incidence have revealed a statistically significant spike after high-fat meals.
There's a physiological explanation. Of the 1124 calories in a 12-ounce porterhouse steak (my favorite), a whopping 72 percent are fat. Elevated fat levels in the blood can trigger production of "free radicals" that cause vessels to constrict, shutting off part of the heart's oxygen supply. The result can be cardiac mayhem.
(You might protect yourself with a cup of tea. In one study, a scientist at Tokyo Medical University in Japan monitored ten people who had just eaten a fatty meal. Five had drunk black tea with dinner; the others, plain water. The tea drinkers scored higher in blood flow and antioxidant capacity than the water drinkers did.)

2. Don't feed your dog chocolate—it'll poison him.
True. Chocolate contains a caffeine-like compound called theobromine. If a dog gets enough of this, it will trigger a seizure or a heart attack—particularly if the pooch is prone to epilepsy or has become overly excited.
This means that if you really want to get rid of a dog, your best bet may be a couple of Hershey bars and a live rabbit.
Well, actually, the lethal dose depends on the size of the dog and the type of chocolate. The killer serving is approximately one ounce of milk chocolate, one-third ounce of semisweet chocolate, or one-tenth ounce of baker's chocolate *per pound of dog*. This means I need 15 Hershey bars to knock off Wally the Schnauzer (22 pounds)—but if I go for the Special Dark, I can do it with only eight.*
Question: What if your dog comes to you extremely jittery, with a chocolate ring around his mouth and Nestlé Crunch on his breath?
Answer: If you think he's wolfed down anywhere near the lethal dose, 1) stick your fingers down his throat and, 2) call the veterinarian. If all else fails, feed him (the dog, not the vet) activated charcoal or extremely black burnt toast. Any theobromine that's still in his stomach will chemically bond with the carbon and be safely eliminated in that stuff we often step in.
* No animals were harmed during the writing of this article.

3. "Mama" Cass died from choking on a ham sandwich.

False. This is one of the most widely repeated myths in rock-music history.
When the overweight contralto for the Mamas & Papas dropped dead in a London flat on July 29, 1974, initial press reports said that her doctor had guessed she "probably choked to death on a sandwich." But a leading forensic pathologist who performed the autopsy found no food in her trachea. (No drugs, either.) He and the coroner blamed the death on a massive heart attack stemming from long-term obesity. Cass stood 5' 5" (until she died, that is) and weighed 238.
Nevertheless, the "sandwich" story stuck, and was soon embellished with the word ham, possibly as an anti-Semitic jab. (Elliot was Jewish, born Ellen Naomi Cohen.) Today, of course, her heart problem might well have been detected early and treated with anticholesterol
drugs and, of course, **Diet Power**.

4. The best Cajun cooks always spit in the food.
False. Sometimes they forget.
(I'm *kidding*, okay?)
Julia Child happened to be on "Larry King Live" the night I was pondering this question, and she said nice things about Cajun food, but she also admitted that she didn't know much about it, so I didn't bother phoning her. (She died a year later, at age 91.)
Instead, I searched the Food Network's Web site (21,000 recipes) for *Cajun + spit*. It turned up no recipes containing both words. So I really don't know the answer to this one (please **email me** if you do), but I'm pretty sure that a) the practice would be illegal in a public restaurant, and b) any germs it might spread would be boiled or fried to death anyway.

5. A disgruntled customer has been giving away a company's secret cookie recipe on the Web.
False. This is an urban legend that's older than the Internet. In the original story, the cookie company was Mrs. Fields. (I heard a similar tale about a *cake* recipe in the 1950s, however.) Lately, a new version has been circling the globe via email. It usually goes like this:
In the restaurant at a Neiman-Marcus store, a shopper is served an incredibly delicious chocolate-chip cookie. She asks for the recipe. The waiter says, "I'm sorry, madam, but it's a secret." She wheedles and cajoles, and finally the waiter summons the manager. "I'll give you the recipe," the manager whispers, "but you must keep it quiet, and it will cost you two-fifty." Surprised at the price, she eagerly accepts. Later, she finds the recipe written on her check along with the words "Cookie Recipe, $250." She protests that she's been hornswoggled, but the manager insists that after all, she did get the recipe she ordered—and it was a secret. Now, to get even, she's trying to send the recipe free to everyone in the world. "Please forward it to at least ten of your friends," says the email, "and tell them to do the same!"
It's true that Neiman-Marcus sells a delicious chocolate-chip cookie. But the recipe isn't secret. In fact, the company publishes it on its own Web site, along with a note saying, "Copy it, print it out, pass it along to friends and family. It's a terrific recipe. And it's absolutely free." (**Click here to see it**.)
(My theory is that a clever marketer at Neiman-Marcus, having heard the Mrs. Fields version years ago, realized it would spread like wildfire on the Web. The marketer put out a few anonymous emails and forum posts that cited Neiman-Marcus instead of Mrs. Fields, and *boom*!—a billion dollars worth of free advertising.)

6. Manufacturers are putting cancer-causing chemicals in our foods.
True—but it's not what most people think.
First, let's deal with the word *chemical*. Because you're smart enough to use Diet Power (or at least to visit our website), I'm sure you already know that a chemical is "any substance with a distinct molecular composition that is produced by or used in a chemical process," as our friends at **www.dictionary.com** put it. This means that *every physical object in the universe* is made of chemicals—including our own bodies.
Second, thousands of *naturally occurring* chemicals cause cancer. One is acrylamide, a substance found in the non-bromated, unbleached flour used in "organic" breads. When fed to laboratory rats, it produces lethal tumors.
Third, "The dose makes the poison," as toxicologists say. Many chemicals that are dangerous in large doses are beneficial or even *vital* in smaller amounts. One is water (see "**Death by Waterlogging**" in our *Piping Hot!* newsletter, July 2002). Another is salt. And still others—vital to both economics and safety—are butylated hydroxytoluene (BHT), which prevents cupcakes and cereals from spoiling; and nitrates, which keep lunchmeats from giving us botulism. Without them, we'd pay a lot more for food—and it would kill us more often, too.
Fourth, when manufacturers put additives in foods, they do so with detailed knowledge of the risks and benefits. They also do it under the eagle eyes of government regulators who are informed by decades of independent scientific research. We live in an open society, and the openness extends even to the things we eat.
I'm not saying the food supply is risk-free. Nothing can be risk-free. But the risks are remarkably well balanced, and that's one reason American longevity keeps rising. Life expectancy reached 77.9 years in 2004, and cancer deaths have been falling since 1990. We are healthier now than any major nation has ever been.
So, yes, food companies are putting carcinogens in our steak and chocolate and ham and cookies—but the leading cause of death these days is not cancer. It's heart disease. And the main causes of
that are smoking, obesity, and lack of exercise.

MYTH BUSTING MOM-ISMS

1. "Stop cracking your knuckles...it will give you arthritis!"
For some odd reason, young boys love cracking
their knuckles. Whether it's the sound of the crack or the feeling it makes, we feel relieved when one cracks a knuckle. After getting all that finger stress out, Mom smacked you upside the head, reminding you of the extreme arthritis you'd get because of all that cracking.
A study of 300 people who had bad habits of cracking their knuckles **did not find any evidence that doing so leads to arthritis**. Some of these individuals did lose strength in their hands and also had soft tissue damage. The "cracking" noise you hear when you crack a knuckle is merely a release of nitrogen gas that is constantly building up in your fingers. Arthritis is usually a symptom that you feel later in life and is usually inherited from your parents.

2. "If you shave your facial hair, it will come back thicker."
One of the most important times in a young
man's life is the first sight of facial hair growth. A teen can sometimes grow a beard in their early years while others try to catch up to their more-manly brethren. Mommy doesn't want her little boy to grow up to quickly, and devised the reverse psychology technique of telling you that shaving would make your beard come back fuller. So you shaved constantly and mom had a boy for a little while longer.
Shaving your hair **has nothing to do with the growth of new hair**. If it did, wouldn't your balding father would be spending extra time shaving his head? The reasons for thinking this way relates to the thickness of new hair as opposed to the older, thinner hair that you most recently shaved off. In addition, hair is only alive in the scalp, so cutting it off does nothing to affect its growth.

3. "Watching TV too close will hurt your eyes and make you go blind!"
The first things you did after school involved
plopping your little butt down in front of the TV and catching some cartoons. G.I.Joe, Transformers, & My Little Pony- all of these wonderful programs kept us at bay for hours. We kept our eyes glued to the action - all at the risk of going blind, something mom loved to point out.
If you were watching the television your Grandmom had as a child, then maybe it could happen. Very early television sets did emit a form of radiation, which causes all kinds of problems.Other than that extreme case, there's **really nothing wrong with sitting closer to the TV** then if you were farther away. It can put a strain on your eyes, but the notion of going blind is simply untrue.

4. "It's cold outside - if you don't bundle up you're going to get sick!"
When was the last time you saw an adult who was happy
that it was cold and snowing outside? The upside of cold weather included snowball fights, Christmas, and missing days from school. The downside? Catching a cold, supposedly. Mom always had us put on multiple layers of clothing. Was mom just being too over protective of her freezing young ones or just a little crazy?
This old wives tale is a rather obvious one to debunk once some simple understanding of **how common colds work in the first place**. Colds are the result of a simple virus that we get from breathing in from the air. People stay inside more during winter, with all the doors and windows shut. This makes for a drop in fresh air circulation, creating more opportunities for you to breathe in those pesky cold viruses.

5. "Make sure to clean behind your ears - if not, potatoes will start growing there!"
Taking a bath was on the most hated list of
things to do, right up there with cleaning your room and going to bed early. Mom knew this, as she spent years dragging you into the water and forcing that

Johnson's & Johnson's baby shampoo all over your noggin. When it was time to wash ourselves, the "potato ears" were just frightening enough to keep them squeaky clean.
Mom grew up with the potato threat to get her bum in the bath, and she passed it onto you to do the same. And if we didn't **wash behind our ears**? Then you probably smelled funny and were made fun of a lot, but there were never any potatoes.

6. "If you swallow a watermelon seed, if will grow inside your stomach!"
Kids love watermelon, meticulously picking
out the seeds as they ate the favorite summertime treat. Everyone remembers the time that one got through - what did we do? We ran to mom to tell her what happened and that we were scared of the watermelon that would eventually grow inside of us.
Luckily, mother's warning was merely a way for us to make sure we didn't choke on any of the seeds, as little ones tend to do from time to time. Other small complications could arise from **swallowing seeds**, such as one being lodged in the appendix or damaging an intestine, but these would just be rare occasions.

7. "Don't swallow that gum - it will stay in your stomach for seven years!"
When it came time for us to be allowed to
chew gum, mother only did so with the strict knowledge that swallowing that gum would hurt our little tummies for years to come. Then came the day when you simply forgot about the Juicy Juice that you were chomping down on one minute and before you know it, down the hatch it went.
Wrong again mom! Accidentally swallowing gum every once and awhile is not going to turn your stomach into Bubble-Yum. Gum is made up of two major components, sugar and a type of plastic. Your body breaks down the sugars and the plastic gum ends up in your stool. There's **really no way gum can "get stuck"** inside your belly.

8. "You're too young to start drinking coffee - it will stunt your growth."
When you are a kid, the notion of being grown
up seems so cool, which just proves how innocence and stupidity go hand and hand. Every parent started their day off with a nice fresh cup of joe. As you wanted something that made you feel more grown up, mom was there to mention coffee would stunt your growth. Back to coco we went, because being short was like being a kid forever!
Coffee has never been responsible for stunting anyone's growth. The reason behind the lie used by parents is to deter their teenagers from **drinking coffee because of it's other side effects**. Caffeine is the most addictive drug in the world, and mom knows that. Having a lot can create anxious teens with too much energy.

9. "Eating your carrots will improve your eyesight enough to see in the

dark."
The white lies that mom threw at us were to make sure we stayed safe. Now carrots, on the other hand, were something that she encouraged us to eat - because, eating them would make our eyesight better. Already we had come to terms with going blind from sitting too close to the TV, so if there was a way to reverse its affects by eating carrots, then we were all over it.
The reality of carrot intake actually improving our eyesight to the levels of being able to see in the dark are ridiculous. The myth probably started when one mother found out that Vitamin A is one needed to maintain healthy eyesight, **with carrots of course being rich in the vitamin**. Of course, no amount of carrots could be eaten to actually *improve* our vision.

10. "Stop playing with that toad - you'll just get warts on your hand!"
While we had a dog or cat growing up, what was even cooler was getting to play with animals that you didn't see on a regular basis. And when it came to animals in the backyard, finding a frog or toad jumping around was a rare occasion, resulting in chasing it down and giving it the mason jar treatment. Until we learned about the warts.
No, mom, you can't get warts from playing with a toad. Warts, in fact, are very similar to colds - they are caused from a virus that infects the underlying layers of skin and are passed from one person to another via direct contact. The myth that the toad is responsible probably arises from the wart-like growths that toads have to camouflage them in their environment. Another reason has to do with people who are allergic to certain types of toads, and have developed wart-like rashes.

11. "Wait an hour after eating to get in the swimming pool, or you'll get a cramp and die!"
Splashing around in the pool was all day affair. Once the hot dogs and hamburgers were gone, it was back to the pool for any unfinished water business. Then mom warned that if we jumped in the water too soon, it might be our last time. All of a sudden that pool of refreshing water turned into a pool of fire.
During digestion of food, **more blood is sent to help in the process**, with less left around to tend to our muscles. It is possible to get a cramp if you're using those muscles more than your body can handle. Drowning because of cramp is just another of mother's exaggerations.

12. "If you keep making that face, it might freeze and stay that way forever!"
One if the earliest forms of making fun of your classmates was using your facial expressions. Flashing a tongue, crossing our eyes, pushing our nose up - all of these things either made some unsuspecting friend cry to mommy. That is, until mom caught on and let us know that those crazy faces could end up becoming permanent.
Mom completely lied when she told you that your face could freeze just because

you were sticking your tongue out at others. Usually a child with complications or **loss of control of facial muscles** has these symptoms from conditions they are born with, sadly. Other diseases, such as Parkinson and Huntington's disease can affect these muscles, but are not developed until later in life.

13. "You're going to poke someone's eye out with that!"
Growing up, whatever resembled a lightsaber from
Star Wars probably at some point got used as a weapon. Whether it was a toy, a broom handle, or even the cardboard from a roll of wrapping paper, Mom would always warn us about "poking someone's eye out" which either scared us enough to stop or made us swing even harder.
Playing with toy swords and brooms could result in a number of injuries, but probably wouldn't result in the "poking" of one's eye out. It is possible that the **eye could be severely damaged** in the process, but an eyeball flying out of the socket is not going to happen without pulling it out with your fingers.

14. "Eating too many spicy foods will give you ulcers."
Teenage boys tend to enjoy spicier foods. You
have young men everywhere seeking out the spiciest things around in the hopes that they can brave the heat to sit at the table with the "big boys" like Dad and Uncle Ron. "Bring on the wings, the salsa, the jalapeno", you say. And mom chimes back with, " and "don't forget the ulcers!"
Eating spicy food does not have anything to do with causing ulcers. The work conducted by Australians Robert Warren and Barry Marshall ended up in the **awarding of the Nobel Prize,** who concluded that stomach ulcers are actually developed by a strand of bacteria known as *helicobacter pylori*.

15. "Get down from there - you're going to fall and crack your head open!"
Thanks to all the comic books that were read as a child,
it's no shocker that many a young gal or lad were caught climbing trees like Spiderman. Mom of course shouted for you to come down before you "cracked your head open". The mere thought of your head spilling out its insides like Humpty Dumpty sealed the deal.
It's probable you could obtain **hundred other possible head injuries**; everything from a minor concussion to traumatic brain damage could have occurred. However, other than landing on a well placed axe, your chances of breaking your skull open were small.

16. "If you keep playing with it, it will fall off someday."
Out of all the lies that mom mentioned to us over
the years, perhaps none was taken more seriously by adolescent boys then the possibility of it it "falling off". How dare mother get involved in the first place - she didn't have one, so how could she know for sure? Then the epiphany kicked in - of course, that's why she didn't have one! She knows because it happened to her! The most frightening mom myth turned out to be the biggest lie of them all! Of

course mom had to do something about the situation - her little boy was finally growing up to be man, something every mother has to deal with at some point. However, **health professionals will tell you** that, no mater how much you "play" with it, it's never going to fall off!

Are You Food Savvy?

Have you consumed myths about diet and nutrition? Take these quizzes to find out.

(CBS) Advice is easy to come by these days, but how much of it is good advice? Certainly, when it's about what we eat, there are plenty of half-truths and just plain dumb ideas going around. **Dr. Mallika Marshall** stopped by ***The Saturday Early Show*** to talk about some common food myths and set things straight.

Myth 1: Make sure you drink at least eight glasses of water a day.
The Skinny: Okay, how many times have you heard this? Well, the recommendation is not based on any data. And in fact, studies over the past few years have shown that most healthy adults, who don't live in severely hot climates or who don't engage in overly rigorous activities, can simply drink when they're thirsty and not waste their time counting how many glasses of water they've had. And remember, to quench your thirst, water's a great option, but all non-alcoholic beverages count, even those with caffeine, and many foods have a high water content.

Myth 2: Don't eat after 7 p.m. if you're trying to lose weight.
The Skinny: In the end, it's really the total calories you've consumed in a day that will cause you to gain or lose weight and not so much when you eat those calories. So if you've worked late or been to the gym and can't eat dinner until 9 p.m., then by all means have something to eat. Just make it a light meal so you don't end up with acid reflux or indigestion if you head to bed soon after.

Myth 3: Don't give your children chocolate milk. It's got too much sugar in it.
The Skinny: Well, it's true that flavored milk, like chocolate or strawberry, have added sugar, but in truth, it has less sugar than juice, fruit punch or soda. And a 2002 study found that children who were given the option of flavored milk were much more likely to meet their calcium requirements than other kids and did not have a higher sugar or fat intake overall. And remember, a child's calcium requirement goes up as they age at a time when kids are less likely to drink milk. So if you can get your child to get more dairy by offering chocolate milk or yogurt smoothies, by all means, do so.

Myth 4: Instant oatmeal isn't as nutritious or healthy as the slow-cook kind.
The Skinny: It's true that the steel-cut oatmeal that takes a half hour to simmer on the stove has a lot of fiber and takes longer to digest, but the instant packets still use whole grain oats that are mashed a bit more and still contain a lot of soluble fiber that can help reduce cholesterol. The problem is all the added sugar with the flavored packets…so choose the plain kind and sweeten it with artificial

sweetener or add some raisins or nuts for flavoring.

Myth 5: Enjoy all the chocolate you want. It's good for you!
The Skinny: We know that chocolate has heart healthy antioxidants, but the kind of chocolate we tend to grab when we get a craving isn't the chocolate we're talking about. It's the really dark, bitter chocolate with a high percentage of cocoa that gives us the antioxidant benefits. So yes, have a small sample of dark chocolate on a regular basis, but don't overdo it with the creamy milk chocolate most Americans love.

Myth 6: Don't drink wine or beer before hard liquor or you're going to get really sick.
The Skinny: Have you heard this? Wine before liquor never sicker, liquor before wine, always fine? Well, it doesn't really matter. There's nothing special about the way the different alcohols mix together to make you sick or not. But the more you drink, the less inhibited you are and you're more likely to keep drinking. So if you start with beer, which has a lower alcohol content, and then switch to the hard stuff, you're more likely to get drunk, and suffer the consequences in the morning.

Myth 7: If you're pregnant and you have a cold, you just have to suffer through it. There's nothing you can take.
The Skinny: It's true that if you're pregnant, there are many medications that you should avoid taking because they could be harmful to the fetus. But there are medications that are safe to take during pregnancy, and some of these include common over the counter cold medications. In general, it is safe to take acetaminophen or the active ingredient in Tylenol. And most obstetricians will give you the green light when it comes to certain cough syrups, decongestants, antihistamines, and nasal sprays. So, if you're coughing and stuffed up, don't continue to suffer. Call your OB and get a list of medications that you can in fact take to ease your discomfort

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Genetically Altered Food: Myths and Realities

by Rick Charnes, EarthSave Boston

"Up to now, living organisms have evolved very slowly, and new forms have had plenty of time to settle in. Now whole proteins will be transposed overnight into wholly new associations, with consequences no one can foretell, either for the host organism, or their neighbors....going ahead in this direction may be not only unwise, but dangerous. Potentially, it could breed new animal and plant diseases, new sources of cancer, novel epidemics."[1]

For those of us who follow a plant-based diet, this moment is truly a crossroads in history, a turning point from which we may never be able to turn back. The plant-based diet we have been following is under radical attack by a new class of foodstuffs never before seen on the planet. It is therefore incumbent upon us to truly understand the scope of this phenomenon in all its dimensions.

We are poised at a moment in time where we, as individuals and as a society, face a choice between two paths. One path is that we find the personal and political will to move forward to an environmentally sustainable, healthy and

organic agriculture. The other path is that we follow the pied piper of big business-controlled biotechnology and genetically altered food into potentially uncontrollable disasters of a magnitude never before seen on our planet.[2]

The introduction of genetically altered (GA) food is part of a powerful series of interlocking political, economic and scientific mechanisms in our society wherein large corporations such as St. Louis-based Monsanto and Swiss-based Novartis have developed techniques to alter or disrupt the genetic blueprints of living organisms - plants, animals, humans and microorganisms - in order to secure patent and intellectual property rights. These firms then formally 'own' these new creations, the resulting 'transgene' foods, seeds, or other products, and then sell them for profit.

This is of great concern to EarthSave members, not only because of the health and environmental consequences of these technologies, but also because of their social and political ramifications. We understand that in order to have a healthy and sustainable plant-based diet, we need to radically democratize the food and agricultural policy of our society. We need to change these policies so that they are not based not on the needs of business with its constant need for profit, market share and growth, but rather on the health and environmental needs of all the planet's citizens.

The worldwide alarm about the safety of genetically altered food, both for human health and the environment, has reached a monumental pitch for those who care to listen. In the European Union and particularly Great Britain, citizens have stated clearly and forcefully that they simply do not want these foods grown in their countries or on their dinner table. On June 24, EU environmental ministers moved to implement the legal equivalent of a three-year moratorium on any new approvals of GE foods or crops. In response to huge consumer demand, many grocery chain stores in Britain have removed these foods from their shelves. In May, the prestigious 115,000-member British Medical Association (the equivalent of the AMA in the US) issued a report, which called for a moratorium on GE foods and crops. The BMA warned that the commercialization of untested and unlabeled gene-foods could lead to the development of new allergies and antibiotic resistance in humans. In third world countries such as India, farmers have been protesting against the loss of their independence and traditional farming practices entailed in this radical new form of agriculture. In the United States, the movement is only beginning, and I believe we in EarthSave have a vital and unique role to play in this.

What is genetically altered food?

Approximately 50% of all the soy and 38% of the corn acreage planted in the US this year is genetically altered. In addition, much of the canola oil in the US market is from genetically altered plants. Given the prevalence of these products in processed foods, unless you are eating all organically grown food chances are you're already consuming some of this food without knowing it. It remains unlabeled and typically not segregated from non-altered food, so if you are consuming vegetarian products containing any of these ingredients not labeled as organically grown, it is more than likely that some of what you are eating is genetically altered.

There are two common forms of genetic alteration of foodcrops. In the first, used frequently with soy, the plant is modified in order to be resistant to the Monsanto

herbicide Roundup™ so that farmers can apply it to kill weeds without killing the young soy seedling. In the second, often used with corn, the plant is modified to contain within its genetic structure a pesticide called Bt (Bacillus thuringiensis). We are told that these genetic modifications are made in order to reduce the amount of chemicals applied externally. Yet, in part because of the increasing resistance to these chemicals by pests, all indications so far are that these genetic modifications may in fact be leading to their increased use.[3]

Contrary to its proponents' sweet-sounding words, genetic engineering is a form of plant breeding radically different from anything that humans have ever practiced in our history.[4] All prior forms of plant breeding have relied on the plant's natural mechanisms of reproduction. Only related species can be bred together in this fashion. With genetic engineering, however, genes from one species are synthetically inserted into a different species with which it could never breed in nature. Furthermore, traditional breeding always takes place on the species level, whereas genetic alteration is done at the level of the gene. In order for this to happen, the natural species barriers of the recipient plant are deliberately overcome and broken down. This process is typically affected by a virus that acts as a 'vector' to overcome the plant's normal protective mechanisms and insert the new genes into the recipient, and then as a 'promoter' in order to turn on the functionality of these new genes in the recipient plant. This process is called 'gene expression.'

Health Risks

By altering the genetic composition of the plant genome (the entirety of the genetic structure of an organism), this process introduces new proteins into the human and animal food chains. This means that human beings are now consuming products that have never before been considered foodstuffs. There is concern that these new proteins could potentially cause toxic or allergic reactions,[5] or other health effects. Unfortunately, there is no easy way to predict the allergenic potential of GA foods since allergic reactions typically occur only after the individual consuming the food is sensitized by initial exposure to the allergen.

There has already been at least one known health disaster regarding genetically altered products. In 1989 the Japanese company Showa Denko marketed a GA version of the supplement L-tryptophan. After the release an estimated 5000 people suffered from an outbreak of Eosinophilia Myalgia Syndrome (EMS). It was initially reported that 37 people died, and 1500 were left with permanent disabilities.[6]

When gene engineers splice a foreign gene into a plant or microbe, they often link it to another gene, called an antibiotic resistance marker gene (ARM), that helps determine if the first gene was successfully spliced into the host organism. Some researchers warn that these ARM genes might unexpectedly recombine with disease-causing bacteria or microbes in the environment or in the guts of animals or people who eat GE food, contributing to the growing public health danger of antibiotic resistance. Research from the Netherlands show that these antibiotic resistant marker genes from genetically altered bacteria can be transferred horizontally to indigenous bacteria in an artificial gut.[7]

One of the rationales offered by the federal government for its approval of GA food is the claim that it is "substantially equivalent" to non-GA food. This

conclusion, however, was reached with inadequate study, and recent research has called it into question. A 1999 study by Dr. Marc Lappe found that concentrations of beneficial phytoestrogen compounds -- thought to protect against heart disease and cancer-were 12-14% lower in genetically modified soybeans than in traditional strains.[8] It is important for EarthSave members to consider the number of vegetarian soy products on the market and to understand therefore how severe the threat is to the health of our plant-based diet.

Earlier in 1999, prominent front-page headline stories in the British press trumpeted scientist Dr. Arpad Pusztai's explosive research findings that GA potatoes, spliced with DNA from the snowdrop plant and the Cauliflower Mosaic Virus (CaMv), a commonly used viral promoter, are poisonous to mammals. When fed to rats, these GA potatoes, found to be significantly different in chemical composition from regular potatoes, caused highly significant reduction in the weight of many organs, impairment of immunological responsiveness and signs suggestive of viral infection.[9]

The biotech companies proclaim the benefits of the elements inserted via the genetic engineering process, such as herbicide resistance and insecticidal properties. Unfortunately, nature doesn't work as simply as these scientists might wish, as we must consider not only what is added via the GA process, but to the process by which it is added. One of the most alarming parts of Dr. Pusztai's research was that damage to the rats' stomach linings - apparently a severe viral infection - most likely was caused by the CaMv viral promoter, used by nearly all GA foods and crops.

Dr. Mae-Won Ho, Reader in Biology at the Open University in Great Britain and a Fellow of the US National Genetics Foundation, is of the opinion that the viruses used as vector and promoter for the new GA foods are the most dangerous aspect of the alteration process. Most typically used is the Cauliflower Mosaic Virus, which despite the name is actually present in many of the vegetables that make up our standard diet. However, there is a great difference between the CaMV we may eat everyday in vegetables and the promoter used in GA food. Ordinary CaMV cannot enter mammalian cells because its protein coat is specific to plant cells. In nature, a virus is typically ensheathed in a protein coat that enables the defenses of any species being invaded - whether plant or human - to recognize it as a foreign body. In order to overcome this natural protective process, however, the genetic engineers remove the protein coat, creating 'naked DNA' which is then unrecognizable as foreign by the recipient plant, which will then receive it and take it into its own genetic structure. The CaMV promoter used in GMOs comes in the form of this naked viral DNA and naked DNA of any sort is highly infectious.[10]

Viral DNA fed to mice has been found to resist digestion in the gut. Large fragments passed into the bloodstream and into white blood cells, spleen and liver cells. In some instances, the viral DNA may integrate into the mouse cell genome.[11] Viral DNA is now known to be more infectious than the intact virus, which has a protein coat wrapped around the DNA.

Evidence is accumulating that DNA is not broken down rapidly in the human intestine as has been previously supposed, thus providing for the possibility that transgenes and antibiotic resistance marker genes may spread to bacteria in the gut.[12]

Because these viruses are capable of recombining and jumping species, we

must be aware that we cannot rule out the possibly of their triggering a vast range of public health disasters.

Environmental Concerns

One of the most frightening aspects of the increasing acreage given over to GA crops is that the pollen from these plants can travel miles from their host via wind and insects and fertilize other non-GA crops or related weed species growing nearby.[13] This has already happened with canola (known as oilseed rape in England)[14] and sugar beet, creating the potential for superweeds.[15] After touring the American Midwest, one farm analyst noted, "there are Roundup™ resistant weeds everywhere now."[16] Furthermore, the genes inserted by the alteration process are more biologically vigorous and may be up to 30 times more likely to escape than the plant's own genes.[17] We have already seen this process take place with disastrous results with other 'exotic' and invasive species such as kudzu in the south, zebra mussels in our waterways, etc.

Even organic food is threatened. Some 87,000 bags of organic corn chips manufactured by Wisconsin-based Terra Prima had to be destroyed when a Dutch importer discovered genetic contamination that had apparently blown over via pollen from a nearby GA plot in Texas where the corn was grown.

In some of the most publicized American research to date, Cornell University scientists reported recently that 44% of monarch butterfly larvae died within four days when fed milkweed (their exclusive food) that had been dusted with pollen from GA corn, while all the caterpillars fed normal corn pollen survived.[18] British research has shown that beneficial insects such as ladybugs and lacewings are negatively affected by feeding on GA crops, which are supposed to only affect 'target' insect predators.[19,20] Study has begun on the effects on the rest of the food chain, as birds and other wildlife then feed on these insects that have consumed the GA crops. Fear of his has led English Nature (the British Government's wildlife advisor) to warn that the introduction of GA herbicide tolerant crops "could be the final blow for species like the skylark, the linnet and the corn bunting."[21]

As these novel organisms enter and gradually saturate the biosphere, there is grave concern for the effect on soil microorganisms upon which many other organisms depend.[22] When applied externally, Bt remains active only a few days in the environment. However, when engineered into the genetic structure of the plant, a recent study found it to be active in the nearby soil at least eight months later.[23] Bt toxins are engineered into a wide range of transgenic plants already released into the environment and this build-up in the soil may have a devastating influence on pollinators and other beneficial insects.[24]

EarthSave's Unique Role

The biotech companies insist that this radical food technology is needed to feed the world's growing population, and in their many advertisements tout biogenetic food as the solution to world hunger. Of course we have all heard this propaganda before, years ago during the Green Revolution. Delegates from 24 African nations responded to recent pro-biotech advertisements with the following statement:

"We...strongly object that the image of the poor and hungry from our countries is being used by giant multinational corporations to push a technology that is

neither safe, environmentally friendly, nor economically beneficial to us. We do not believe that such companies or gene technologies will help our farmers to produce the food that is needed in the 21st century. On the contrary, we think it will destroy the diversity, the local knowledge and the sustainable agricultural systems that our farmers have developed for millennia and that it will thus undermine our capacity to feed ourselves."[25]

World hunger is not a problem of technology or insufficient production, but primarily one of unequal distribution and economic inequality. As farmers lose their land and move to the cities, they also lose their food-independence and begin to rely on money, often in drastically short supply for many in the third world, in order to buy food that they formerly grew themselves. The accelerating corporatization and concentration of agriculture, in which big business is playing such a large part, is hastening this process, thereby actually increasing the problem of hunger.

The new seeds offered by the biotech companies are not legally the property of the farmer who only leases them from the company. The farmer may not legally re-plant his own seeds, a measure insisted upon by the industry in order to protect its intellectual investment. As happened during the Green Revolution of the 1960s, however, this further commodification of the entire food system will increasingly tend to favor wealthy and larger landowners, further marginalizing poorer farmers and throwing even more off the land, therefore only contributing more to the hunger problem.

Though considering the drumbeat of propaganda one would expect otherwise, there is very little evidence that GA crops produce larger yields. Research has shown mixed results, with some studies revealing approximately 5%-10% lower yields for GA soybeans.[26] The biotech companies are also fond of insisting that organic agriculture produces yields too low in order to feed the world in adequate amounts. This is highly questionable, as test plots in several countries have shown organic agriculture producing equal or greater yields than chemical or genetic agriculture. Furthermore, we can only speculate what organic agriculture could produce if more than a paltry 1% of USDA research funds were allocated to this superior form of agriculture.[27, 28]

I believe, however, that we in EarthSave have a particularly vital role to play as the public debate about genetically altered food sharpens in this country. Those who follow a plant-based diet understand that one of the most healthful and environmentally sustainable ways for more food to be made available is for our global civilization to begin to make the slow, inexorable shift, along with the tremendous dislocations and resistance it will entail, towards a plant-based diet and agriculture. As the percentage of animal foods in the human diet gradually decreases over time, we as a society will be able to utilize the substantial grain and legume acreage throughout the world for human rather than animal consumption. When accompanied by necessary changes in the political and economic institutions that hold these structures of animal agriculture in place, tremendous amount of foods can be freed up, thus rendering irrelevant the genetic engineers' primary argument.

I am convinced that this is a very powerful response to the misleading information put out by the biotech companies regarding GA food. Because of this, I hope that local chapters and the international organization will take our knowledge of the importance of a plant-based diet and use it in a comprehensive

way to help the growing movement against GA food and agriculture.

Political Perspectives

Given the immediate threat to the quality of our diet, many of us now see the importance of taking up this issue not only as a matter of personal dietary choice but as something requiring political education. After educating ourselves in a serious way about this, a number of us who once shied away from politics are finding that we simply have no choice but to engage this issue in both the personal and political realms.

Our opposition to the genetic engineering of food is not based on any generalized antagonism to science but rather on a skepticism of an outdated but commercially profitable reductionist science that can only understand the whole in terms of its pieces, reduced to readily quantifiable entities such as genes. There has been developing for quite some time in the scientific community a more rigorous and advanced understanding of the complex webs of life of which our human food and agricultural systems are but a part. This more modern science is coming to a recognition of the marvelously subtle interactions between genes and the entire organism, and between genes and the environment. The science of genetic engineering of food, on the other hand, relies on antiquated notions of genetic determinism, in which it is falsely believed that there is an easily discernable one-to-one correspondence between a gene and a trait. It is a science generated to serve the needs of business, and it is primarily to serve these needs that these extreme new foods were developed.

We find it repugnant to see private companies create new life forms only to reduce them to nothing but commodities on the global marketplace. We must stand up and say loud and clear wherever we can: the needs of business for profit, market share, return on investment and protection of intellectual property rights must always be subservient to the health needs of human beings and the natural environment. When there is a clash of these two realms - and this seems inevitable - we will always stand up for the latter.

Ethical and Spiritual Views

We in the Boston chapter have spent a great deal of time studying these issues and the reductionist science, ideology and economic structures that lead to these technologies. We see in the genetic alteration of food crops not only an extremely serious hazard to health and to the natural environment, but also an affront to the wholeness and integrity of life upon which we base our understanding of the world. We understand and honor the intricate connections between the evolution of the plant kingdom and our own human evolution. We are concerned about the effects that this radical modification of the genetic structure of plants will have on current and future human, as well as other earthly, life.

Considering the redesigned genetic code of life which we are now taking into our bodies, we understand now that what is involved here is in effect a fundamental remaking of the human being and its future evolutionary path. There is no recalling these organisms once they are released into the biosphere; they become a permanent part of our world as long as the earth is capable of supporting life. The process is biologically irreversible.

We reject a worldview that sees nature as something to be picked on, picked

apart, analyzed, spliced, recombined, deconstructed and reconstructed according to our human desires of the moment. This is not a psychologically healthy ideology by which we choose to live our lives, nor is it conducive to maintaining a nourishing emotional and spiritual climate for children and adults. We believe it leads to a constant tendency to see the world as being at one's beck and call, as ours to use in whatever way we see fit.

We are particularly concerned about what kind of religion or spirituality can survive this assault on the integrity of life, this forceful penetration of human analytical knowledge into the most minute and sacred arenas of life. Most religions have based themselves on some human sense that we are part of a whole, which is greater than ourselves. This sensibility naturally inspires awe, humility, gratitude and appreciation. If our food, our climate, and all of life begins to carry an easily recognizable human imprint, what effect will that have on our spiritual lives?

The memory, the 'feeling' of the entire universe lies within us. When we sit down to eat, we take in not only physical nourishment but also a sense of the connection to all of evolution, to all of natural and human history, through the DNA inherent in every species that we eat and therefore transform into our bodies, minds, hearts and souls. Every act of eating is an affirmation of that evolution, of that connection. It plays a part in how we physiologically and psychologically understand and sense ourselves as natural beings, as expressions and creatures of the earth. One might speculate that the artificial food we've been eating up till now has been a major factor in the breakdown of that sensibility. It's not entirely unreasonable, then, to suggest that the new genetic alteration of our foodstuffs would be a quantum leap in the breakdown of that connection.

When we said in the 60s that "we are stardust, we are golden," one way we might understand this is to acknowledge that our DNA contains the "memory" of our entire natural history, from the creation of the universe to the beginnings of organic life on earth to the evolution of humanity.

When we eat healthy food and take the DNA of other creatures into our bodies, we ritually and physically enact the story of that evolutionary and environmental journey. Will the artificial restructuring of the DNA in our food rupture that connection in ways that we can't now even begin to imagine?

The earth with its myriad species is a thing of beauty, elegance, grace and balance. It offers itself to us for our pleasure, joy and nourishment when we learn to listen and watch carefully. The genetic engineering of food represents a radical step backwards, a devolution of the human species and the planet, a step leading to unknown health disasters and environmental havoc.

With our understanding of the value of a plant-based diet we in EarthSave have in our hands a profound tool we can use to help the world think and act our way out of this challenge. Using this tool might require an expanding of our focus on our traditional concern with encouraging dietary choice. It may require us to help people see the importance of making a political analysis of the situation as well as to ask the spiritual questions now posed to us by the biotech revolution and the genetic alteration of our food supply. Let us as individuals and an organization find the personal and collective courage to do so.

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Organic foods are healthier to eat.

Did you ever wonder why Chinese drink only hot tea? They boil it to kill the bacteria. **Most local Chinese farming uses organic methods, in that the only fertilizers used are human and animal waste: Without being boiled, it's basically a nice cup of E. coli. In the case of China and other poor Asian nations, the reason for organic farming has less to do with ideology and more to do with lack of access to modern farming technology.**

The National Review reports that Americans believe organic food is healthier by a 2-1 margin, despite the lack of any evidence supporting this. When you take the exact same strain of a plant and grow it in two different ways, its chemical and genetic makeup remain the same. One may be larger than the other if one growing method was more efficient, but its fundamental makeup and biochemical content is defined by its genes, not by the way it was grown. Consumer Reports found no

consistent difference in appearance, flavor, or texture. A blanket statement like "organic cultivation results in a crop with superior nutritional value" has no logical or factual basis.
Some supporters of organic growing claim that the danger of non-organic food lies in the residues of chemical pesticides. This claim is even more ridiculous: Since the organic pesticides and fungicides are less efficient than their modern synthetic counterparts, up to seven times as much of it must be used. **Organic pesticides include rotenone, which has been shown to cause the symptoms of Parkinson's Disease and is a natural poison used in hunting by some native tribes; pyrethrum, which is carcinogenic; sabadilla, which is highly toxic to honeybees; and fermented urine,** which I don't want on my food whether it causes any diseases or not. Supporters of organics claim that the much larger amounts of chemicals they use is OK because those chemicals are allnatural.
But just because something is natural doesn't mean that it's safe or healthy — consider the examples of hemlock, mercury, lead, toadstools, box jellyfish neurotoxin, asbestos — not to mention a nearly infinite number of toxic bacteria and viruses (E. coli, salmonella, bubonic plague, smallpox). When you hear any product claim to be healthy because its ingredients are all natural, be skeptical. By no definition can "all natural" mean that a product is healthful.

STEVIA

1. Introduction

Stevia is an incredibly sweet herb, obtained by a natural selective breeding process of the sweetest Stevia parent plants. The sweetener, stevioside, extracted from the plants, is 300 times sweeter than sugar. The fresh leaves have a nice liquorice taste.
What makes the Stevia plant so special is that it can be used to replace sugar (sucrose). Indeed, the leaves contain diterpene glucosides with a sweet taste but which are not metabolised and contain no calories. The biggest part of the sweet glucosides consists of the stevioside molecule.
The principal advantages of Stevia are the following:
- it is a completely natural non-synthetic product;
- stevioside (the sweetener) contains absolutely no calories;
- the leaves can be used in their natural state;
- thanks to its enormous sweetening power, only small quantities need to be used;
- the plant is non-toxic;
- the leaves as well as the pure stevioside extract can be cooked;
- no aftertaste or bitterness;
- stable when heated up to 200 degrees;

- non fermentative;
- flavour enhancing;
- Clinically tested and frequently used by humans without negative effect;
- ideal, non-addictive sweetener for children.

Many different uses of Stevia are already well-known : as table sugar, in soft drinks, pastry, pickles, tobacco products, candy, confiture, jam, yoghurt, chewing gum, sorbets... The dried leaves of Stevia are about 40 times sweeter than sugar.

2. Description of the plant

Stevia rebaudiana Bertoni (Bertoni) is a perennial herbaceous plant and is part of the Asteraceae family. This family includes well known plants such as dandelion, sunflower and chicory. The plant was first described botanically by Dr. M.S. Bertoni in 1899. The lanceolate leaves are about 5 cm long and 2 cm wide and are planted crosswise, facing each other. In the wild, the height of the plant varies from 40 to 80 cm but when cultivated, the Stevia can become 1 metre high. Stevia can be grown on relatively poor soil. The plants can be used for commercial production for 6 years, during which five times a year a harvest takes place of the part of the plant that is above the ground (in Paraguay and Brazil). The roots remain in place and so the plant regenerates again. Plants which are 1 metre high have a dry weight of 70 g on average. The dry weight of the leaves can vary from 15 to 35 g per plant.

1. **Origin and history**

The history of the culture of Stevia mainly stems from Paraguay and Brazil. Originally Stevia only grew in the northern regions of South America. The plant has been known for centuries by the native Guaranay-Indians for the sweet taste of its leaves. They use it, amongst other things, to make "mate" herbal tea. Stevia is often described as "sweet herb of Paraguay" and is referred to as the "sweetest plant of the world". Such terms show the amazing power of this herb.

Europe first came in contact with the herb when, in the 16th century, the Spanish rulers learned of the "sweet honey herb" used by the natives of South America. In spite of the description of the plant by the Paraguayan botanist M.S. Bertoni in 1899, the research and commercial use of the plant had a slow start.

Around 1908 the presence of several sweeteners in Stevia was reported but it only became possible to crystallise stevioside in 1931. During World War II, the allies considered extracting stevioside commercially as an alternative for sugar supplies which were running out. Unfortunately, at that time the technology needed for industrial production was lacking. Because of the restriction on the use of artificial sweeteners, imposed around 1970

in Japan, the research in Japan for the commercialisation and utilisation of stevioside made quick progress. For over twenty five years now, Japanese consumers have been using the extract from the plant as a safe, natural, non-calorific sweetener. It is currently the most used sweetener on the Japanese and Korean market. The commercial production takes place mainly in Paraguay, Uruguay, Central America, The United States, Israel, Thailand and China.

2. **The refined Product**

Stevioside is a white, crystalline powder that is extracted from Stevia leaves. The extraction can be done in a way which is friendly to the environment. Scientists call stevioside a "noble molecule". It owes this epithet to a number of qualities :

- the product is 100 % natural
- no calories
- up to 300 times sweeter than sugar
- no toxic effects
- absolutely safe for diabetics, phenylketonurie (PKU) patients, slimming people.

Stevia rebaudiana - Stevia Product - Stevia Packet

stevia plus stevia side effects

History and safety of Stevia - Does stevia have side effects?

Stevia rebaudiana has been used as a sweetening ingredient in foods and drinks by South American natives for many centuries,. Stevia rebaudiana has been added to a number of food products in Japan since the mid 1970s. No indications of any significant stevia side effects have yet been reported after more than 30 years of use. Similarly, no reports of any stevia side effects have been reported in the United States. There are no indications at this point from any source that stevia rebaudiana has shown toxicity in humans.

As of 2008, this remarkable, no-calorie sweetener called stevia rebaudiana is, unfortunately, not a household name. It should be. We believe that eventually stevia will be one of the most popular and widely used sweeteners in the world. With the availability of stevia rebaudiana, there seems to be little reason to use artificial sweeteners such as aspartame and saccharin.

Stevia Clear Liquid Extract 2 oz.

NuNaturals,

- **Stevia rebaudiana pure liquid**
- **Dietary Supplement**

NuNaturals uses an EXTRACT which has been laboratory tested and certified to contain a minimum 90% of the steviosides, the active ingredient of stevia rebaudiana while retaining the other beneficial components. Because of this, you can

be assured that you are indeed buying a true Stevia extract and that it will be consistent in quality. This is a highly concentrated extract and should not be confused with less potent tinctures or extracts.
Stevia Clear Liquid Supplement Facts
Amount Per Milliliter
Stevia Extract 140 mg
Stevia rebaudiana (20:1)
Click here, Stevia rebaudiana, to purchase stevia clear liquid, flavored stevia drink, stevia powder, and stevia packets, or to sign up to a Free newsletter
Q. I purchased a bottle of Stevia Clear about 3 years ago...is it still safe for consumption? I am considering using it in baking.
A. Stevioside found in stevia is a stable molecule and can last many, many years.
Brief History and safety of Stevia Rebaudiana
Stevia rebaidiana has been used as a sweetening ingredient in foods and drinks by South American natives for many centuries, and there is no report of any plant toxicity to the consumers . Stevia has been added to a number of food products in Japan since the mid 1970s. No indications of any significant side effects have yet been reported after more than 20 years of use. Similarly, no reports of any adverse reactions to stevia have been reported in the United States. Donna (co-author of The Stevia Cookbook) and her family have been using stevia rebaudiana since 1990 without any health problems. I have used stevia daily in my morning tea since 1997 without any health problems. There are no indications at this point from any source that stevia has shown toxicity in humans. For more stevia rebaudiana information.
Table of Contents of The Stevia Cookbook
Part I, History of Stevia Rebaudiana

Stevia rebaudiana use in Children

Candies, sodas, ice cream, pies, cakes... it's disturbing how many sweet products are ingested by children on a daily basis. All that sugar can lead to tooth cavities and obesity. Partially substituting with stevia can help children satisfy their sweet tooth while decreasing the risks from excessive sugar intake. If you're a parent, you can take advantage of the many recipes provided in *The Stevia Cookbook* to provide your children with tasty sweets that will satisfy their sweet teeth but not cause damage to the teeth. Obesity in children is a growing problem in this country and any method we have of helping children reduce their caloric intake will be greatly beneficial. There is also a concern with children consuming excessive amounts of artificial sweeteners. The potential, long-term health consequences of saccharin and aspartame ingestion are currently not fully known, but they do need to be kept in mind. Eliminating all artificial sweeteners will be a frustrating enterprise since they are extremely prevalent. However, by partially substituting stevia in homemade desserts, you can significantly reduce your children's exposure to these artificial chemicals.

Stevia rebaudiana use in Pregnancy or Breast Feeding

Since human studies providing stevia sweetener during pregnancy have not been done, it is not known whether its use during this period is safe. It's very likely that small amounts of stevia would not cause any problems.

Stevia rebaudiana Practical Tips

Those who are novices at using stevia often make the mistake of using too much. Since stevia is 300 times sweeter than sugar, excessive amounts can lead to over-sweetness and an aftertaste. Generally, one teaspoon of stevia would be equivalent to one cup of sugar, while a quarter teaspoon would be equivalent to one tablespoon of sugar. Stevia is available in concentrated liquid form, and often two to four drops of stevia liquid added to tea or coffee is sufficient to sweeten the drink.

Stevia Rebaudiana Safety Study

"Assessment of the carcinogenicity of stevioside in rats," was the title of an article published in the June, 1997 issue of Food and Chemical Toxicology. We were very excited and anxious when we came across this study. Was this latest information going to show that stevioside was safe, or potentially harmful?
This latest study was performed by Dr. K. Toyoda and colleagues, from the Division of Pathology, National Institute of Health Sciences

in Tokyo, Japan. For a period of 104 weeks (two years), three groups of rats were tested to receive either no stevioside (the controls), stevioside in a concentration of 2.5 percent of their diet, and stevioside in a concentration of 5 percent of their diet. There were 50 male and 50 female rats involved in the study. All surviving rats were killed at the end of week 108. The results showed the body weight of the rats was less in those who received the stevioside compared to the controls. This makes sense because stevioside has no calories. When the organs and tissues of the rats were examined under the microscope, there was no difference in the controls and those on stevioside, except females on stevioside had a decreased incidence of breast tumors, and the males had a lesser incidence of kidney damage. The researchers state, "It is concluded that stevioside is not carcinogenic in F344 rats under the experimental conditions described."

You may recall at the start of this chapter that we estimated an average person's daily dietary intake of stevioside to be, at most, about 0.01 percent of the total daily intake of food. It is reassuring that rats given significantly higher amounts of this sweetener did not have a higher incidence of tumors. Our interpretation of this research would lead us to believe that the small amounts of stevioside we consume daily to be extremely safe.

As you can see, stevia rebaudiana appears to be extremely safe. Nevertheless, it was banned for import in 1991. Where the reasons justified?

Safety of Stevia rebaudiana

Stevia rebaudiana is a natural, no calorie sweetener which is extracted from the stevia plant leaf that grows naturally in South America. Stevia, in our opinion, is safe and significantly safer than practically all of the artificial sweeteners currently on the market. Stevia has been given in massive doses to three generations of rodents with no harmful effects noted. Stevia has been used in Japan for more than 3 decades with no adverse reactions reported. It's too bad that more Americans have not heard of this amazing and safe sweetener. I personally prefer the clear liquid extract, although each person has their own preference. There is a wide range of quality among different stevia brands depending on the extraction process.

Summary

Hopefully, with time, stevia rebaudiana can be added to a variety of sodas, candies, gums, and other foods in the US, just like it currently is in Japan and other countries. And we could see stevia packets at restaurants.

Stevia rebaudiana products

Stevia Plus is by Sweet Leaf Stevia Products
SweetLeaf Stevia is by Wisdom natural brands
KAL Stevia
NOW Stevia - NOW Foods sells stevia packets - Suggested Use: 1 stevia extract packet with tea, coffee, beverage or as desired in cooking or baking. Stevia Extract, 100 packets Now Foods. NOW Foods Stevia packets are the size of regular packets for sugar or artificial sweeteners. You can take them along on trips or while at a restaurant to use instead of the artificial sweeteners in your tea or coffee.
Stevita Stevia
Stevia Balance

Stevia rebaudiana questions

Q. What is Stevia Plus ?
A. Stevia Plus is a stevia product with Frutafit Inulin Fiber (FOS), stevia extract (standardized to a minimum of 90%). There are dozens of stevia products on the market, including Stevia Sweetleaf, and Stevia Plus is one of them.
Q. Splenda vs stevia. Which is better?
A. Most people in the natural health industry prefer stevia over Splenda.
Q. Is it necessary to use organic stevia?
A. The amounts of stevia used to sweeten food are so miniscule that we do not feel it is necessary to go out of one's way in order to use organic stevia.
Q. I am interested in flavored stevia. Are there flavored stevia drinks?
A. There are packets made of flavored stevia that come in lime, orange and strawberry. These packets can be mixed in a quart or 2 pints of water for a flavored stevia drink.
Q. Is there such a thing as stevia toxicity
A. Since stevia has been available to the American public from the mid 1990s, we have not heard of even one case of stevia toxicity.
Q. Is stevia legal in Canada?
A. Yes, stevia and stevia leaf extracts are legal in Canada.
Q. Where can I find stevia wholesale?
A. Several companies sell stevia wholesale inluding Stevita and Sweet Leaf or SweetLeaf.
Q. What is the equivalent for stevia liquid and powder?
A. This is hard to say since each company has its own way of preparing stevia, concentrating it, extracting it and mixing it with other substances as a powder. Some add xylitol or maltodextrin. There is stevia clear liquid and stevia whole herb liquid. Buy two or three different stevia products and test them to see which ones you

like best.
Q. Would you consider stevia rebaudiana to be a weight loss herb?
A. Only indirectly. Stevia does not influence appetite so it is not an appetite suppressant. However, if you use stevia instead of sugar, and you consume fewer calories, then you could
Q. I have been using stevia for several years now and love it, knowing it doesn't have the chemical issues as other sugar substitutes such as saccharin. However, I am concerned about a Time article I read about "artificial" sweeteners, such as saccharin, whose long term use researchers think may have a link to overreating and hence,
obesity. I would appreciate your response to this article. From a scientific standpoint, would stevia cause the same metabolic reaction to the sugar effect as saccharin, potentially causing overreating and weight gain?
http://www.time.com/time/health/article/0,8599,1711763,00.html?cnn=yes
A. When these types of studies are done in animals, they are fed foods almost exclusively sweetened with an artificial sweetener. In contrast, most humans who consume stevia do so in small amounts, adding stevia to tea or coffee, but continue to eat other foods throughout the day that have sugars. Therefore, unless a person uses stevia in every food at every meal, the rodent studies are not likely to be applicable to us humans eating a regular diet with a little bit of stevia used as a sweetener.
stevia safety stevia plus
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Commentary from the Providence Journal (RI), 5/10/2000
BACK TO CSPI PAGE

Strong-arming an innocent herb

By Linda and Bill Bonvie

IN THEIR REVEALING BOOK *Toxic Sludge is Good for You*, authors John Stauber and Sheldon Rampton chronicle the ways in which corporate propagandists pose as consumer advocates or hijack grassroots organizations to further the agendas of various industries.
The most recent example of such flagrant misrepresentation can be found in the type of disinformation now emanating from the Center for Science in the Public Interest, often referred to as the "food police."
This supposed consumer watchdog organization that has waved high its antifat banner while remaining outrageously easy on certain harmful food

additives, most notably aspartame and MSG, has hit a new low.
CSPI, whose 30-year record of haranguing consumers about their food choices has included an irritating attack on ethnic food and a whine about dietary supplements, now is using its $13 million budget to shoot down the herb stevia with a manipulative report in its April "Nutrition Action Healthletter."
This attack on a natural, noncaloric sweetener used for centuries in South America and for over a quarter century in Japan is a poorly thought-out attempt to discredit a beneficial herb that poses no threat whatsoever to human health but a potentially big one to corporate profits.
Stevia, 150 to 400 times sweeter than sugar, a plant native to Paraguay, is now enjoying increasing popularity, especially in Japan, where it has been thoroughly tested for toxicity and declared completely safe for human consumption.
No reports of adverse effects in people have ever been associated with stevia in its long history of use. The U.S. Food and Drug Administration has full authority to take action against stevia -- now sold in the United States as a dietary supplement -- if any evidence that it harms humans exists. None does. Stevia, however, is credited by many people with having various beneficial health effects -- particularly in stabilizing blood sugar (it is considered ideal for diabetics) and inhibiting tooth decay.
With a spin that might well have come from an industry public-relations flack, the CSPI article and accompanying press release about stevia cite poor and irrelevant science and fail to mention the wealth of research and historical data that has shown stevia to be perfectly safe. Even the two outside experts they quote take contradictory stands.
One, toxicologist Ryan Huxtable from the University of Arizona in Tucson, is quoted by CSPI as saying "the take home message is simply that we don't know enough [about stevia]." In 1992, however, he had a different opinion. Endorsing a 45-page safety review on stevia by Douglas Kinghorn, professor of pharmacology at the University of Illinois at Chicago, Huxtable said, "There seems little scientific reason for the FDA not to approve the use of stevia extracts in the United States."
Professor Kinghorn also makes an appearance in the CSPI campaign: "The Japanese don't consume large amounts of stevia," he is quoted as saying in its report. He, too, contradicts himself in his 1992 review, Kinghorn states, "Stevia extracts and/or stevioside (a concentrated extract) have been widely used as sweetening agents in Japan over the last 15 years; . . . no adverse reactions have appeared in the scientific or medical literature during this period, and it may be concluded . . . that these materials do not present a potential toxicity risk to humans."
The CSPI attack on stevia contrasts sharply with the group's relatively benign treatment of aspartame (marketed chiefly as NutraSweet). Although the center gave aspartame a little yellow "caution, try to avoid" flag on its Web site's food-additive section, its nutritionist, Jayne Hurley,

once greeted reporters who came to find what CSPI staffers ate for lunch with aspartame-sweetened yogurt.

The most widely used synthetic sweetener in America, aspartame has long been associated with a variety of health problems, ranging from migraines to seizures to blindness, and it has resulted in thousands of consumer complaints to the Food and Drug Administration and Monsanto, Nutrasweet's current maker. Before its introduction on the market, in fact, the FDA's own scientists expressed concerns about its propensity to produce brain tumors in test animals, but were overruled by the FDA's Reagan-era commissioner.

What has kept stevia from successfully competing with aspartame in the United States, however, is an FDA campaign to suppress it -- initially via an "import alert" that appears to have been triggered by a trade complaint from an as-yet unidentified company (which evidence suggests was NutraSweet). It is now permitted to be marketed as a dietary supplement so long as it is not labeled as a "sweetener."

The rationale given by the FDA for trying to keep stevia off the shelves was that it is an "unsafe food additive" based on an alleged paucity of research and a couple of studies that supposedly raised questions about its effects on reproduction.

But, in fact, there have been plenty of studies on stevia -- many of them submitted in two petitions presented to the FDA seeking "generally regarded as safe" (GRAS) status for the herb -- as well as a long history of use. The latest attempt by the "food police" to strong-arm this sweet, innocent herb is nothing more than an empty imitation of the FDA's transparent attempts to discredit stevia by ignoring all the existing positive data on it.

Especially egregious is an attempt by CSPI to suggest that a test-tube derivative of stevia called steviol might causes cancer. There is no evidence to show steviol can be produced from stevia when ingested by people. As Kinghorn himself has pointed out, "We do have the evidence from the Japanese that stevioside is not carcinogenic."

With enemies like CSPI, the industrial barons squeezing the life out of our natural bounty need no friends. Given its record of downplaying the danger of aspartame and MSG, and now a smear campaign against stevia, the group is giving new validity to a moniker some critics have bestowed upon it, "Center for Science in the Corporate Interest."

Linda and Bill Bonvie are New Jersey-based health and environmental writers.

1 WIND ENERGY MYTHS

Wind energy is more expensive than conventional energy.

Wind's variability does increase the day-to-day and minute-tominute operating costs of a utility system because the wind variations do affect the operation of other plants. But investigations by utility engineers show these costs to be relatively small—less than about 2 mills/kilowatt-hour (kWh) at penetrations under 5% and possibly rising to 5 mills at 20% penetration. In fact, when the Colorado Public Service Commission issued a ruling in 2001 on the 161-megawatt (MW) wind project in Lamar, Colorado, the commission determined that wind energy provided the lowest cost of any new generation resource submitted to an Xcel Energy solicitation bidding process (except for one small hydro plant).The commission also noted that unlike the other generation resources considered, the Lamar project avoided the risk of future increased fuel prices.
And in a recent landmark study of wind integration into the New York State electric power system, a 10% addition of wind generation (3,300 MW of wind in a 34,000-MW system) actually projected a reduction in payments by electricity customers of $305 million in one year.

2

Wind energy requires a production tax credit (PTC) to achieve these economics. True, but every energy source receives significant federal subsidies; it is disingenuous to expect wind energy to compete in the marketplace without the incentives enjoyed by established technologies.

3

The production tax credit and accelerated depreciation are helpful only to big, out-of-state developers. The economic benefits aren't local, and rural electric cooperatives and municipal utilities can't receive the same benefits. It's true that only entities that pay federal taxes can use the tax credits to reduce their tax liability. But those tax credits result in lower wind energy costs for the benefit of all electricity customers. However, if local entities assume equity positions in wind plants, then they can receive the tax credit benefits.Whether or not the wind-plant equity is locally held, wind plants result in jobs for the local community and the need for local services—both during construction and during operation. Additionally, the added county and state taxes and the landowner

lease payments directly benefit the local and state economies.And to the extent that debt financing comes from local sources, debtservice payments stay within the local community.
Also, in some cases farmers have joined together in a cooperative arrangement to build and own wind plants. In aggregate, their tax liability can be sufficient to make full use of the tax credits.

4

Wind energy is unpredictable and must be "backed up" by conventional generation. No power plant is 100% reliable. During a power plant outage—whether a conventional plant or a wind plant—backup is provided by the entire interconnected utility system. The system operating strategy strives to make best use of all elements of the overall system, taking into account the operating characteristics of each generating unit and planning for contingencies such as plant or transmission line outages.The utility system is also designed to accommodate load fluctuations, which occur continuously.This feature also facilitates accommodation of wind plant output fluctuations. In Denmark, Northern Germany, and parts of Spain, wind supplies 20% to 40% of electric loads without sacrificing reliability.When wind is added to a utility system, no new backup is required to maintain system reliability.

5

If wind energy displaces energy from existing coal plants, then rates will go up. Rates for electricity from wind plants being installed today are comparable to wholesale electric power prices of 2.5¢ to 3.5¢/kWh.The incremental cost of wind power, if any, will be negligible when distributed among all customers. A number of studies have examined the rate impacts of wind and have considered the costs of various renewable portfolio standard percentages from 5% to 10%, and average residential bill impacts are predicted to range

from a savings to a premium of 25¢/month. In fact, some studies predict the accompanying decrease in demand for conventional fuels will reduce fuel prices enough to fully compensate for slightly higher costs for renewables. In the New York study mentioned above, wind displaced energy from both coal and natural gas plants. Rates decreased, and harmful emissions from the coal and gas plants were reduced as well.

6

New natural gas power plants provide cheaper energy than wind plants. This is not likely with today's rising gas prices.At $3/MBTU, the fuel cost alone is 2.5¢ to 3¢/kWh, and capital and O&M costs add a similar amount.Today, gas prices have risen to more than $6/MBTU, yielding a fuel cost alone in the 5¢ to 6¢/kWh range.And gas prices have spiked to more than $10/MBTU in past years. Betting on low gas prices over the foreseeable future is highly risky, while energy costs from wind plants will be relatively stable over time. In a recent study, Lawrence Berkeley National Laboratory found that the natural gas "hedge value" of wind could be conservatively estimated to be 1/2 cent/kWh.

7

Large, utility-grade wind turbines can't be installed on the distribution grid without expensive upgrades and power-quality issues. In situations with weak distribution grids (long lines with thin wires and few customers—maybe even singlephase), this can be true. However, in many cases wind generation can be connected to the distribution system in amounts up to about the rating of the nearest substation transformer. One study of a rural Midwestern county estimated that several tens of megawatts of turbines could be installed on the local distribution grid with a minimum of upgrade expense and minimal power-quality impacts. A number of single wind turbines and clusters of turbines are currently connected to the distribution system.

8

Small projects that might be suitable for co-ops or small municipal utilities are not economical. Small projects

generally have a higher cost per megawatt than larger wind plants, as would be expected. However, the incremental costs on customers' bills are likely to be small. The energy premium for a small project is unlikely to exceed 50%. If the project provides a small portion of the community's needs—say 2%—then the premium is reduced to about 1% if distributed among all customers. Some communities view this premium as a worthwhile investment to obtain local environmental benefits and experience with wind power.

9

Wind turbines kill birds and thus have serious environmental impacts. Bird kills have caused serious scientific concern at only one location in the United States: Altamont Pass in California, one of the first areas in the country to experience significant wind development. Over the past decade, the wind community has learned that wind farms and wildlife can and do coexist successfully. Wind energy development's overall impact on birds is extremely low (<1 of 30,000) compared to other human-related causes, such as buildings, communications towers, traffic, and house cats. Birds can fly into wind turbines, as they do with other tall structures. However, conventional fuels contribute to air and water pollution that can have far greater impact on wildlife and their habitat, as well as the environment and human health.

10

Wind turbines are noisy. Modern wind turbines produce very little noise. The turbine blades produce a whooshing sound as they encounter turbulence in the air, but this noise tends to be masked by the background noise of the blowing wind. An operating modern wind farm at a distance of 750 feet to 1000 feet is no more noisy than a kitchen refrigerator.

You can find more information on wind energy **myths** at www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/wpa/34600_misconceptions.pdf

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1 www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/xcel_wind_decision.pdf

2 www.nyserda.org/publications/wind_integration_report.pdf

3
For more on energy subsidies, visit www.earthtrack.net
4
Mark Bolinger, A Survey of State Support for Community Wind Power Development (http://eetd.lbl.gov/ea/EMS/cases/)
5
www.nyserda.org/publications/wind_integration_report.pdf
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Alan Greenspan, Federal Reserve Chairman, testimony at Senate committee hearing, July 10, 2003
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Distributed Wind Power Assessment, National Wind Coordinating Committee, February 2001, available at www.nationalwind.org

Top 10 Food Myths and Facts

Have you heard the one about the fat-forming carbohydrate? Food & Nutrition is continually faced with the challenge of dispelling common myths about calories and weight management, ten such myths have been covered below:

Myth: Eating most of your calories in the evening promotes weight gain.

Fact: No matter when you eat them, you gain weight when you eat more calories than you burn off. However, mindless munching in front of the TV at night can push calorie intake over the top.

Myth: Fat free is calorie free.

Fact: Some people indulge in extra-large servings of fat-free foods, such as cookies, cakes and crackers, without realizing that these foods may contain the same amount or even more calories than regular versions. Get the facts on fat-free foods by checking food labels for the serving size and number of calories

per serving. Fruits and vegetables are naturally low in fat and calories. However, other low fat or no fat foods may still contain a lot of calories. To make such foods taste better, extra sugar, flour, or starch thickeners are usually added. These ingredients are high in calories and may lead to weight gain.

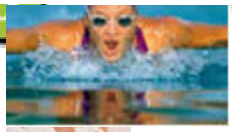
Myth: Carbohydrates (or sugars) cause weight gain.

Fact: Carbohydrates do not cause weight gain unless they contribute to excess calorie intake. The same holds true for protein and fat. Findings from the National Weight Control Registry show that people who successfully maintain weight loss tend to eat diets that are higher in carbohydrates and lower in fat, in addition to watching their total calorie intake. However, some people who eat a diet that is extremely high in carbohydrates and low in protein and fat get hungry sooner, which may trigger overeating.

Myth: High-protein diets cause ketosis, which reduces hunger.

Fact: Ketosis occurs when fat is used as an energy source instead of carbohydrate during a high-protein diet. Ketone bodies are produced, which turn your breath a bad “fruity” odor. Ketone bodies do not reduce appetite, however, eating sufficient protein for your body type can help reduce hunger and support weight loss.

These diets may help you lose weight fast – but most of this weight that you lose would constitute water weight and lean muscle weight instead of fat. The best way to lose weight and keep it off without harming your body is by following a reduced-calorie diet that is well balanced between carbohydrates, proteins, and fats.



Myth: Yoghurt is the perfect diet food. Many dieters swear by it, but some yoghurt can be as fattening as ice cream. Greek yoghurt has 10 pc fat.

Fact: Yoghurt is good for people of all ages. Yoghurt is also important for those wanting to lose weight. As a milk product, yoghurt is naturally rich in calcium. Research shows that calcium helps reduce weight gain. Even small changes in the calcium levels of fat cells can change signals within the cell that control the making and burning of fat. What needs to be remembered is no one food is going to prove magic, it is a combination of effective diet and exercise plan that will really work. Avoid yoghurt that contains added sugars or sweetened fruit, as these upset the delicate chemical balance that allow the cultures to thrive. Sugars also feed the growth on unwanted yeasts, so you're better off without it!

Myth: Exercise makes you eat more. Often people shy away from doing exercise using this excuse.

Fact: However, research has shown that after 20 minutes of exercise people ate no more than those who had done nothing. The only difference was that those who had exercised thought the food tasted better.

Myth: Extra protein makes you strong.

Fact: The body has tremendous reserves and is very adaptive. The idea that you have to eat specified foods in specified amounts every day to maintain performance is unsound. You do not need to starve yourself to lose weight. When we are active, our body uses its own fat and

carbohydrate for fuel. A diet that includes animal and vegetable protein supplies all the body needs to replenish its stores. There is no superdiet for super performance. Besides, high protein diet often lack key nutrients found in carbohydrate foods. You need every kind of food. Avoiding any kind of food is just as wrong as ingesting food supplements.

Myth: Lettuce makes your figure slim.

Fact: The theory adopted behind this fact is that, you can eat a food with low energy density, such as lettuce, and consume a huge amount for few calories. This belief is true to some extent as lettuce leaves practically do not contain calories. A tablespoon of butter has the same number of calories as 10 cups of leaf lettuce. However, generally they are not eaten alone and most lettuce sauces are high in fat.

9

Research suggests that losing ½ to 2 pounds a week by making healthy food choices, eating moderate portions, and building physical activity into your daily life is the best way to lose weight and keep it off. By adopting healthy eating and physical activity habits, you may also lower your risk for developing type 2 diabetes, heart disease, and high blood pressure.

Myth: You can burn fat by eating certain foods, like grapefruit and cabbage soup.

Fact: The grapefruit diet require you to eat half a grapefruit before every meal to reap the benefits of the fruit's so-called fat-burning enzymes. Calories typically are limited to fewer than 800 a day, although some versions require that you eat until you are full. Grapefruit has no fat, is low in calories and sodium, and is packed with vitamin C. But the very low calories — and deficits in protein, fiber and several important vitamins and minerals — can make this diet dangerous. Similarly, the cabbage soup diet proponents report feeling lightheaded and weak because the diet is too low in protein, vitamins and complex carbohydrates. You may lose

weight, but you'll probably be too queasy to enjoy it. Remember, no foods can burn fat. Caffeine-rich foods may speed up your metabolism rate for a short time. However, they do not cause any weight loss. The best way to lose weight is to reduce the number of calories you eat and increase your physical activities.

Myth: Processed foods are not as nutritious as fresh foods.

Fact: Many processed foods are just as nutritious or in some cases even more nutritious than fresh foods depending on the manner in which they are processed. Frozen vegetables are usually processed within hours of harvest. There is little nutrient loss in the freezing process so frozen vegetables retain their high vitamin and mineral content. In contrast, fresh vegetables are picked and transported to market. It can take days or even weeks before they reach the dinner table and vitamins are gradually lost over time no matter how carefully the vegetables are transported and stored.

Some processed foods, such as breads and breakfast cereals, have vitamins and minerals added for extra nutrition. In fact, the growing interest in health and nutrition has spurred the production of a whole new range of foods with added health and nutritional benefits (called "functional foods") such as fat spreads with added fibre to lower cholesterol.

Processing can also make some nutrients more available. For example, removing phytic acid from grain foods by removing the bran helps to improve the absorption of iron from a food. Processing tomatoes into a tomato paste or sauce increases the amount of lycopene (an antioxidant) that is available to the body.

20 Unhealthy Foods That You Think Are Healthy But Are Actually Killing You Slowly

March 27th, 2008 Posted in Diet, Healthy Lifestyle

There are many terms that are misleading in the food advertising industry today. Think of how many times you see the following phrases plastered all over food containers:

- **Fat Free**
- **Reduced Fat**
- **Low Fat**
- **Sugar Free**
- **No Added Sugar**
- **Diet [Insert Product Name Here]**

We are supposed to believe that each of these categories makes a food healthier. In reality, this couldn't be further from the truth.
Here is what these phrases actually translate to:

- **Fat free, but full of sugar and chemicals.**
- **Reduced fat, but increased carbohydrates.**
- **Low fat, but high glycemic index.**
- **Sugar free, but artificial everything else.**
- **No added sugar… because the all natural version has enough sugar to give you type II diabetes anyway.**
- **"Diet" food, but it causes cancer in lab rats so don't drink/eat too much of it.**

Consider the logic that food manufactures would have us believe: fat-free is good for you; jelly beans, jolly ranchers, and cotton candy are fat-free; therefore all those sugary candies are good for you. Makes sense? Think about it. In fact, a study at John Hopkins University recently determined a link between high blood sugar and heart disease. This means high glycemic foods, such as the candy I just mentioned as well as many similar products, are inherently unhealthy.

Let's examine some examples of nasty food that is supposed to be healthy, but will secretly kill you faster than the Terminator (not the Arnold character in any of the sequels).

1. Diet Soda

Why is it good? A sugar free version of the popular carbonated beverage that you can drink on the go.

Why is it bad? OK, so soda is horrible for you, but take out the sugar and add in carcinogenic artificial sweeteners, combined with the artificial flavors and colors that are in all sodas, and you have a recipe for Tumor in a Can. Then of course you've got the caffeine factor, which is linked to hyperactivity, high blood pressure, and can mess with your blood sugar.

Instead choose: filtered water and the occasional glass of milk

2. Sushi made with white rice and imitation crab meat or vegetables

Why is it good? Seaweed contains essential nutrients such as selenium, calcium, iodine, and omega-3 fats. Sushi is nearly always wrapped in seaweed.

Why is it bad? This garbage doesn't deserve to be called sushi. They are just small, compact, high glycemic, high calorie, carbohydrate nuggets. There's not even much protein in these things. Eat 3-4 of them and you've had your serving for the day. Aside from that, imitation crab meat isn't even good for you. It is mostly just a crab flavored tofu-like substance fortified with sugar, sugar, and more sugar.

Instead choose: In order to get some healthy carbs, some high-quality protein, and the benefits of omega-3 fats, choose real sushi made with salmon or tuna. To make it even healthier, order sashimi instead of white rice.

3. Peanuts

Why is it good? Peanuts contain healthy fats that contribute to the reduction in triglycerides, which are known to promote cardiovascular disease. In addition to monosaturated fatty acids, peanuts also contain magnesium, vitamin E, arginine, fiber, copper and folate all of which help to reduce the risk of cardiovascular disease.

Why is it bad? Aside from being high in fat and calories, peanuts also are loaded with omega-6 fats that distort the omega-3 to omega-6 ratio. This ratio says that your intake of each omega fatty acid should be 1:1. The reasons why this ratio is recommended is a topic for a whole other article. All we need to know is that the American diet is typically from 20:1 to 50:1 in favor of omega-6, so any effort to reverse this trend is important for combating over 10 different common diseases including Alzheimer's, rheumatoid arthritis, and diabetes. Peanuts are often contaminated with a carcinogenic mold called aflatoxin, and they are also one of the most pesticide-contaminated crops.

Instead choose: almonds or all natural organic peanut butter, but pour off the top layer of oil and replace with olive oil if the resulting peanut brick is too stiff. Olive oil is very low in omega-6 fats.

4. Reduced-Fat Peanut Butter

Why is it good? All peanut butter provides a heart-healthy substantial quantity of monounsaturated fat.

Why is it bad? Most commercial peanut butters are made with the same type of sugar that cake frosting is made with. Reducing the fat makes it even worse because even MORE nasty sugar is added and they contain less healthy fat. I'd rather just eat the extra calories.

Instead choose: As with peanuts, choose almonds or all natural organic peanut butter instead. Just remember to pour off the top layer of oil and replace it with olive oil if the resulting peanut brick is too stiff. Olive oil is very low in omega-6 fats. I personally, after switching to all-natural, can no longer stomach commercial peanut butter. It tastes like sweetened lard to me now so I'd rather barf than eat it at all.

5. Corn Oil

Why is it good? It contains omega-6 fatty acids, which are unsaturated fats that don't raise cholesterol. Sweet.

Why is it bad? In the true spirit of peanuts, corn oil has 60 times more omega-6s than omega-3s. Omega-6 fatty acids increase inflammation, which boosts your risk of cancer, arthritis, and obesity. This is why we prefer a balanced ratio of omega-3s, which are found in walnuts, fish, and flaxseed.

Instead choose: Canola or Olive oils, which have a far better ratio of omega-6s to omega-3s. In my humble opinion, choose olive oil instead since canola oil has some less important issues of its own.

6. Fat-Free or Reduced Fat Salad Dressing

Why is it good? Less fat means less calories. Plus that salad dressing fat is lard just like mayo and crisco. Sick.

Why is it bad? Firstly because when fat comes out, sugar goes in. Either that or artificial flavors and sweeteners. Secondly, since many vegetables are fat soluble, taking away the fat from the dressing means fewer of the salad nutrients will be absorbed into your body. This was confirmed by a study at Ohio

State University wherein a higher fat salad dressing resulted in an increased uptake of the antioxidants lutein and beta-carotene.

Instead choose: A salad dressing made with olive oil, or just use olive oil and vinegar as your salad dressing. If you try it you might like it.

7. Anything made with Soy

Why is it good? It's not. But in the spirit of argument: vegetarians and vegans eat the stuff so they can get protein in their diets. Yay ::sarcasm:: Plus the stuff is apparently low in fat and an alternative to whey for the lactose intolerant.

Why is it bad? Straight up, soy is linked to lower testosterone and increased estrogen in males, and is also linked to increased breast cancer in women. Soy also promotes hypothyroidism, thyroid cancer, and infertility just to name a few additional disorders. Phytic acid, trypsin inhibitors, toxic lysinoalanine and highly carcinogenic nitrosamines are all highly present in soy products. Infants in particular can be adversely affected in many negative ways from exposure to soy, including premature development in girls, and underdevelopment in boys. Some people also are allergic to soy protein.

Instead choose: any high protein whole food such as brown rice, goats milk, coconut milk, almond milk, whole grains, nuts, seaweeds, seeds, beans, and lentils. If you must have a protein powder, choose any of a variety of protein powders available on the market today, including whey and egg protein. As a side note, goats milk is considered one of the healthiest foods on the planet today, so give it a try.

8. Yogurt cups, especially those with fruit at the bottom

Why is it good? Individually, fruit and yogurt are two of the healthiest food choices at the grocery store.

Why is it bad? Manufacturers load these products up with corn syrup, which effectively doubles the amount of sugar. All the better to entice kids to ask you to buy this crap.

Instead choose: Activia yogurt, which contains additional live active cultures to help your digestive system. Choose the Light version if you wish, but it is sweetened with sucralose (Splenda). I enjoy Splenda quite often, but we have yet to know if there are an significant long term effects from its use. After all there are a few theories which suggest that consuming sucralose is like consuming very small amounts of chlorinated pesticides. There are at this time no conclusive tests that sucralose has any long term negative side effects.

9-11. Fruit Juice, Dried Fruit, and Fruit Cocktail

Why is it good? Well because fruit is good for you. It has a ton of vitamins, minerals, and antioxidants; not to mention fiber.

Why is it bad? Fruit juice and fruit cocktail normally have sugar added. Some fruit cocktails come in a thick sugary syrup, and there's more sugar in a glass of fruit juice than in a candy bar and as much as in a glass of soda (grape juice has about 40g of sugar in one serving). You get no fiber from fruit juice, and the stuff usually has preservatives added to it. Dried fruit is similarly bad because it is also loaded with sugar, although not with added sugar. Think of it this way: take any fruit, which is naturally loaded with sugar, remove all the moisture thus shrinking it down to a fraction of its normal size, then sell it by the bucket load to consumers who don't understand that this little tiny piece of fruit still has nearly all the calories and sugar of the original fruit! Can anyone say "portion control"? What about "blood sugar coma"?

Instead choose: eat the whole fruit including the skin if possible, but limit it to one serving of fruit per meal/snack to avoid insulin spikes. If you must have fruit cocktail, choose one that comes packed in its own juices instead of syrup.

12. Smartfood (Cheesy Popcorn)

Why is it good? Because cheesy popcorn is oh so tasty.

Why is it bad? Because you are really just eating the popcorn equivalent of potato chips. Seriously, compare total calories and you will find that you are not saving much on the calorie front by eating Smartfood instead of chips.

Instead choose: get some spray butter, pop some plain popcorn, spray a light coat of spray butter on the popped corn, sprinkle various spices on the corn (but go easy on the salts), and shake it up in a bad. Now you have a low fat tasty treat. Smartfood isn't as bad as a candy bar or a Twinkie though, so go ahead and splurge every so often.

13. Beans packed in sugary syrups such as Boston Baked Beans

Why is it good? Baked beans are good for you because these types of beans are loaded with fiber

Why is it bad? The sugary syrup, just as much as in a can of soda, is just going to spike your blood sugar and insulin levels. This is never good for preventing heart disease or type II onset diabetes.

Instead choose: Red kidney beans. These things are packed with protein and fiber, and can be mixed with any sort of salad or pasta. Sometimes I enjoy kidney beans straight out of the can; no cooking, just wash and chow. There are also several other kinds of high protein, high fiber beans, but they typically have to be cooked first. I say this because I tend to be lazy about cooking and I know you do too.

14-20. Granola, White Pasta, Pasta Salad, English Muffins, Bagels, Croutons, and Pretzels

Why is it good? Granola has some fiber, pasta salad has some vegetables, croutons make our salad crunchy, english muffins are one step up from bagels, and pretzels are a quick low-fat snack.

Why is it bad? One word: carbohydrates. All of these foods are made with corn syrup and/or processed white flour. These foods will spike your blood sugar faster than Bruce Lee could have kicked you in the face. You also won't get much nutrition in the way of protein, fiber, vitamins, or minerals from any of these foods.

Instead choose: 100% whole grain or whole wheat pasta and English muffins for increased fiber and protein. Egg salad because, like it or not, eggs are good for you and are high in protein. Almond slices are high in omega-3 fats and are crunchy like croutons. Substitute healthy nuts for white starches whenever you can and you too can receive a 30% less chance of heart disease.

Clearly there are many alternatives to sneaky consumer foods. Fruits and vegetables remain a key ingredient in a healthy diet, and now you can look for tricky catch phrases when purchasing 'health foods'. Drink plenty of water, get plenty of sleep, and eat wholesome low-sugar, healthy-fat foods; I bet you will end up doing OK as a result.

Healthy Food, Exercise, Keys to Cancer Prevention

By Michael Smith, North American Correspondent, MedPage Today
Published: February 26, 2009

RATE THIS REPORT

WASHINGTON, Feb. 26 -- Better eating and physical activity habits could prevent about a third of all cancers in the U.S., a new report says.

The figure -- from *Policy and Action for Cancer Prevention* -- does not include the cancers that could be prevented by not smoking, a habit estimated to cause another third of malignancies.

"We know already that a huge proportion of cancers are preventable by eliminating smoking," said Michael Marmot, M.B.B.S., Ph.D., of University College London.

Use this code to embed video on your website or blog:

<iframe

Video Source: American Institute for Cancer Research

"The message coming out of this report is that many, many more cancers are preventable by healthy patterns of diet, weight, and physical activity," said Dr. Marmot, who was the chair of the panel that produced the report.

Published today by World Cancer Research Fund and the American Institute for Cancer Research, the report was to be presented to U.S. lawmakers on Capitol Hill this morning.

It is based on 2007 findings about how different patterns of diet and physical activity affect risk of cancer. That earlier data was combined with dietary surveys from four countries -- the U.S., Great Britain, China, and Brazil -- to arrive at policy recommendations.

In each of the four countries, the current report says, about a third of cancers could be prevented by proper diet, more physical activity, and avoiding obesity, although the details vary.

For instance, the report authors estimate that about 11% of prostate cancer in the U.S. could be prevented, but the same changes would yield a 20% decrease in Great Britain.

That's probably because intake of foods containing lycopene (from cooked tomatoes) is lower in Great Britain, according to Tim Byers, M.D., of the University of Colorado Cancer Center and a member of the panel that wrote the report.

Conversely, about 70% of endometrial cancer in the U.S. could be prevented, compared with 56% in Great Britain -- probably, Dr. Byers said, because of the greater prevalence of obesity in the U.S.

The report makes recommendations for action by nine groups of so-called "actors" -- including governments, industry, schools, and individuals.

"We're asking all levels of society to build cancer prevention into everything they do," said Shiriki Kumanyika, Ph.D., of the University of Pennsylvania School of Medicine, also a member of the writing panel.

Among the recommendations:

- Governments should require widespread walking and cycling routes to encourage physical activity.
- Industry should give a higher priority for goods and services that encourage people to be active, particularly young people.
- The food industry should make public health an explicit priority.
- Schools should encourage physical activity and provide healthy food.
- Schools, workplaces, and institutions should not have unhealthy foods available in vending machines.
- Health professionals should lead in providing information about public health, including cancer prevention.
- Individuals should use independent nutrition guides and food labels to ensure they buy healthy food.

Dr. Marmot said the 2007 report on the science of cancer pinned down the avoidable causes. The current report, he said, focuses on the "causes of causes" -- the social and cultural barriers to healthy patterns of behavior.

"The 2007 expert report identified the specific choices that people can make to protect themselves against cancer, but actually making those healthy choices remains difficult for many people," Dr. Kumanyika said.

"The policy report takes the next step -- it identifies opportunities for us as a society to make those choices easier," she said.

Dr. Byers noted that the numbers in the report are based on a range of assumptions.

"Having said that," he said, "the figures in this report are as good an estimate as it is possible to achieve about the proportion of cancer cases that could be prevented through healthy diet, regular physical activity, and maintaining a healthy weight."

"On a global level every year," he added, "there are millions of cancer cases that could have been prevented. This is why we need to act now before the situation gets even worse."

At bottom, Dr. Marmot said, "this is a very optimistic report. There is much we can do to prevent cancer."

HEALTHY URBAN KITCHEN

Organic Produce - the Good, the Bad and the Ugly

February 23rd, 2009

· Filed Under: Kitchen & Cooking · Organic Food · Uncategorized

What's the deal with organic food?

It seems to be everywhere these days, right?

Actually, its always been around. I was eating organic food in 1980 because my mom had a friend that owned a health food store in North Miami Beach.

Although many people think it is a new trend in food, organic farming has been practiced since the invention of farming about 12,000 years ago.

Organic produce is grown without pesticides, synthetic fertilizers, free from human or industrial waste, can not be genetically modified and processed with irradiation.

Organic food has fewer pesticides, fewer nitrates from fertilizers, is superior for our health and
the health of the environment, especially our soil.

The first list of produce below has the highest contamination from pesticides.

These are specific foods that you should definitely get organic.

If you can't afford organic food all the time, or when you are traveling and don't have much of a choice,
the second list of produce has the least amounts of pesticides and are relatively safer choices.

What's wrong with pesticides on your food?

According to the Environmental Protection Agency (EPA):
60 percent of herbicides , 90 percent of fungicides , 30 percent of insecticides are known to be carcinogenic (cancer causing).

According to the EPA's website, studies show that pesticides can cause:

Birth defects

Nerve damage

Cancer

Blocking the absorption of important nutrients necessary for normal healthy growth in children

Other long-term effects

Also, toxins are stored in fat. So the more chemical toxins you eat, the more body fat you will accumulate. This is also why its important to not eat the fat from meat that is conventionally raised. However, if the meat is grass fed, then you SHOULD eat the fat.

Most contaminated:

Peaches
Apples
Sweet Bell Peppers
Celery
Nectarines
Strawberries
Cherries
Lettuce
Grapes - Imported*
Pears
Spinach
Potatoes

Carrots
Green Beans

Least contaminated:

Sweet Potatoes
Watermelon
Blueberries
Papaya
Eggplant
Broccoli
Cabbage
Bananas
Kiwi
Asparagus
Sweet Peas-Frozen
Mango
Pineapples
Avocado
Onions

*Since many countries are using pesticides that have been banned in the US, I personally do not eat any produce that has been imported, unless it is certified organic. Since I go to the green market often, I don't find much of a need for imported produce.

The bottom line is that organic food is superior for our health and this planet. I suggest you eat organic whenever possible.

If your local stores do not carry organic food produce, grass fed meats & pastured eggs, I suggest you ask the manager if they can start carrying some.

You can also seek out local green markets, CSA (community supported agriculture) or local Weston A Price groups and have access to the freshest food possible while supporting your local economy and small family run farms.

You can also grow your own fruits, veggies and herbs in your own garden. Even in NYC where gardens are few and far between, rooftop and small local gardens can be found because more and more people
are aware of the importance of organic food.

I will post a very important blog on how the US government is now trying to radically change laws that will force small family farms out of business so that large scale industrial agriculture will dominate food production in this country.

When Americans can tear themselves away from the A-rod, Britney and Brangelina dramas, they might actually see that the US is currently experiencing a civil rights crisis and our health and freedom is at stake.

Talk soon
Antonio

PS - If you want a much more comprehensive list and want to check out one of my all time favorite websites which I use to gather some of my data, go to Environmental Working Group