Dr.G's medisense
ENJOY · LEARN · PONDER

Published by
Healthy Choices for Mind and Body
Written by Ann Gerhardt, MD

Volume 3 Number 4 September 2008

Putting medical and nutrition news into historical, scientific and just plain practical context.

Approximately 5 issues per year. *Request a free email subscription or information about sponsorship at:* algerhardt@sbcglobal.net.
Or send $18 for one year of newsletters to be mailed to you to: P.O.Box 19938, Sacramento, CA 95819.

Read past articles at www.drgsmedisense.com

Sponsorship information, page 8
You can support the educational efforts of Healthy Choices for Mind and Body, by making a *tax-deductible contribution* to HCMB, P.O.Box 19938, Sacramento, CA 95819.

Contents:

Diet Sweetener Scare

www.drgsmedisense.com *September 2008*

Bottom Line At the Top: Next time you read a media story about a diet study in rats, tune it out and wait a few years for the rest of the story. For now, unless you use diet sodas as an excuse to pig out on mounds of food, non-caloric sweeteners do not cause weight gain.

Early this year the media created a hullabaloo over zero-calorie sugar substitutes, inciting fear among dieters. The reason? A rat study, concluding that replacing sugar with non-caloric sweeteners may make weight control harder. Purdue University scientists found that rats fed rat chow plus saccharin-sweetened yogurt ate more calories and gained more weight than rats fed chow and regular yogurt.

"If this is the case in rats, there is little reason to think that humans don't have this same response," said scientist Susan Swithers, PhD. Actually there is a lot of reason to think that humans may not react the same – humans are not rats, don't live in a cage and usually have a more complex brain. (I can think of some politicians who are exceptions, though.)

She speculated that, over time, reduced-calorie sweeteners like saccharin, aspartame, and sucralose interfere with weight regulation, conditioning the body to no longer associate sweetness with calories. This would, she postulates, disrupt the ability to accurately assess caloric intake, leading to overeating…
She got all that from 27 saccharin-fed rats???

This study at best adds a micro-chip of information to the burgeoning and complex field of appetite regulation. We know that at least 10 different peptide hormones from our brain, stomach, gut and pancreas interact to regulate appetite. Some increase, others decrease food intake. We know that knocking out one or boosting levels of another changes things for a while, but eventually the system compensates, returning food intake to the prior status quo.

In addition, humans respond to considerable social pressure and environmental cues that perpetuate eating in the absence of hunger. People eat or binge to cope with feelings that rats might not experience. People rationalize eating when not hungry for such compelling reasons as the

Continued on page 2

Diet Sweetener Scare, *continued from page 1*
food is there, someone else is eating or the TV told us to.

To extrapolate a study of saccharin in rats to all sweeteners in humans is irresponsible. Instead of spending time with the media, the Purdue investigators should have been moving on to test their hypothesis using other sweeteners, experimental conditions and species.

The study's authors shimmy even further out on the limb by correlating the timing of the obesity epidemic with skyrocketing non-caloric sweetener use. Let's get real here: There has also been an increase in sun screen use, but nobody suggests that it causes obesity.

Artificial sweetener use was almost negligible in the 1950s when the first diet soft drinks were introduced. Since then, with the growing popularity of diet beverages, per capita consumption of artificial sweeteners has jumped. In 1978, saccharin consumption (the only artificial sweetener then in use) was equivalent to the sweetening power of 7.1 pounds of sugar per person. That doubled to 15.8 pounds by 1984, slowly increased through the early 2000's and has since leveled off. Obesity prevalence has not.

Our waistlines expanded along with a lot of other gastronomic changes, mostly tied to the All-American notion that we must get the most food and least muscular effort for our money. Two liter high-fructose-corn-syrup sodas, food-addict cruises, 16 ounce steaks, all-you-can-eat buffets, obscenely large potato chip bags, Grand Slam breakfasts and 4 ounce candy bars appeared at the same time and might have contributed just a teensy bit.

Compound that with sedentary jobs, Internet addiction, TV and a national aversion to walk more than 20 feet for any purpose, and the equation equals weight gain every time. It doesn't require subtle appetite regulation by zero-calorie sweeteners to explain the obesity epidemic.

Swithers and the media should also have spent more time in the library reading existing studies of non-caloric sweeteners in humans. Quite a few have been done since the 1990's, mostly using aspartame. No studies in humans have found weight gain or an increase in food intake from consuming sugar substitutes.

The opposite has been found with sugar-sweetened beverages. Though sugar and high fructose corn syrup suppress appetite more than artificial sweeteners, they apparently do not suppress it enough to compensate for their own caloric load. In head-to-head comparisons, people gain weight when drinking sugar-sweetened drinks and either lose weight or experience no change with low-calorie sweeteners. ⚕

Intentional Drug Contamination of Herbal Supplements

www.drgsmedisense.com *September 2008*

The Food and Drug Administration (FDA) has found prescription drugs in herbal supplements sold over-the-counter. The FDA found Viagra (sildenafil) and other erectile dysfunction drugs in Zimaxx, Libidus, Neophase, Nasutra, Vigor-25, Actra-Rx, and 4EVERON, all products that promise enhanced sexual function. **They claim an herbal remedy for impotence, then sneak in a prescription drug to accomplish the goal.**

Other medications found in 'natural' dietary supplements include lovastatin (Mevacor, to lower cholesterol), estrogen (for hot flashes and menopausal symptoms), alprazolam (Xanax, for anxiety), indomethacin (Indocin,

Continued on page 3

Drug Contamination of Herbs *from page 2*

for arthritis and pain) and warfarin (Coumadin, to prevent blood clotting). Often the secret ingredient relates directly to the purpose of the supplement.

It's obvious why manufacturers would not disclose such ingredients: Any time a drug appears in any form meant to be ingested, the efficacy and safety must be tested and FDA approved, regardless of what else is in the pill. Such approval requires rigorous pre-market testing (some other time we can discuss whether drug testing is truly rigorous or unduly influenced by the drug companies).

Do manufacturers have so little faith in their natural ingredients that they have to add proven drugs to achieve an effect? Many herbs do exert pharmacologic benefits – Why not trust them?

The 1994 Dietary Supplement Health and Education Act (DSHEA) amended the Food, Drug and Cosmetics Act to exempt dietary supplements, including herbs, botanicals and nutritional supplements from usual pre-marketing review. As a result of these provisions, **ingredients used in dietary supplements are not subject to pre-market safety evaluations required of other new food and drug ingredients or for new uses of old ingredients.**

Because dietary and herbal supplements do not comply with these requirements, there is no guarantee of their safety, effectiveness, or purity. **You have no way of knowing whether the label's listed ingredients match, overstate or forget to reveal what is really in the bottle.**

Like the fox guarding the hen-house, the law asks that herbal and dietary supplement manufacturers provide their own oversight. The FDA only gets involved if post-marketing reports suggest there is a problem.

We trust that purveyors of "natural" products will be honest about their products' contents. Unfortunately the pursuit of market share and the legal tender incites dishonesty in people we would hope to have high ideals.╢

How Well Do You Like Your Body? www.drgsmedisense.com *September 2008*

Complete this True/False questionnaire, total the 'T' for True answers and see below for my interpretation.

T F

I constantly think about my body size, shape and/or weight.
I am always working to improve my body size, shape and weight.
I would be much happier and my life would be better if I were thinner.
I commonly skip meals to lose weight.
I weigh myself more than once a day.
I know how many calories are in almost every food I eat.
I exercise mainly to lose weight or to look better.
I completely exclude certain foods in order to manage my weight.
I avoid physical activities because I'm embarrassed about my body.
I like to wear oversized clothes to hide flaws in my body.
There are good foods and bad foods.
I'm not good looking if I don't look like magazine models.

SCORE & INTERPRETATION ON PAGE 4

How Well Do You Like Your Body?

Continued from page 3

If your number of 'True' answers is:

0: You either live in Samoa or are one of a nearly extinct species.

1-3: You live in the United States and can't help it.

4-6 You either just had gastric bypass, live in L.A. or forgot that food is for nutrition.

7-8 Food and appearance are running your life. Throw away the magazines and TV and join a soccer team.

≥9 You need serious psychotherapy.

Whether we're aware of it or not, we are influenced by messages about our bodies from our friends, family, advertisements, movies and culture every day. These 'external' messages are really a nuisance, but we're human and for some reason care about fitting in and what other people think of us. If we really have our act together and are self-confident and comfortable with ourselves, our beauty and value radiate from inside us. Ideally we sufficiently respect the work our body does for us to take good care of it with healthy food and moderate exercise.

Getting the Most Out of Your Doctor - Negotiate

www.drgsmedisense.com September 2008

Negotiate your treatment. If you don't like the doctor's plan, say so. If you don't plan to take the pills, let the doctor know, so the two of you can develop a plan you might follow. It wastes both your and the doctor's time to nod mutely and walk away without a resolution for your problem. If the doctor stubbornly insists on "my way or the highway", ask for a referral to someone who might provide an alternative. Be polite, but firm. After all, it's your health, and you need a plan that works for you.

The Skinny about "Non-Caloric" Sugar Substitutes

www.drgsmedisense.com *September 2008*

Bottom Line at the Top: There really is no bottom line, since they are all different. I'll discuss Sweet 'N Low, Splenda, Sunette, Stevia, Naturlose, Neotame and Equal/Nutrasweet, with most detail about the latter, since it is the most maligned.

Some consider sugar substitutes an essential food group - a guilt-free, sweet-tooth appeaser. To others, they are the root of all medical maladies. While the debate rages, I can only give you some facts.

First, most 'zero' calorie sweeteners fib a bit about being calorie-free. Aspartame, neotame and the fraction of tagatose that is absorbed into the body supply 4 calories per gram. Many low or non-caloric sweeteners contain bulking agents that supply a few calories. Companies add these to give the few milligrams of sweetener the texture of sugar and enough bulk to know that something has come out of the packet.

However, the sweeteners are so sweet that a one-gram 'serving' rarely contains more than 50 milligrams of sweetener and all contain less than 1 gram of bulking agent. The packet can claim no calories because any food product with less than 1 gram of protein, sugar or fat *per serving* does not have to list those calories on the label.

Back to the debate: The first non-caloric sweeteners seemed to vindicate their foes. Cyclamate, once a popular sugar substitute, was banned by the U.S. Food and Drug Administration (FDA) in 1970 because it causes cancer. For many years saccharin carried a cancer-related warning label because large amounts caused bladder cancer in rats.

Sugar substitutes made a come-back with a slew of new ones approved by the FDA. The FDA determined that saccharin was safe in humans and removed its cancer-

Continued on page 5

"Non-Caloric" sweeteners *continued from page 4*

related warning label in 2000.

Saccharin, marketed as Sweet 'N Low, was synthesized in the 19th century from chemicals. It tastes 300-500 times sweeter than sugar and is widely used in tabletop sweeteners, diet sodas and baked goods, but has an aftertaste. The bitter aftertaste of saccharin is often minimized by blending it with other sweeteners.

Saccharin causes bladder cancer in male rats by a non-mutagenic mechanism that does not occur in humans. Cancer results from damage to the bladder wall caused by an interaction between saccharin and rat urine. Human urine is different enough that the cancer-causing interaction does not occur. Most countries permit saccharin but restrict use, while a few countries have continued the ban.

Each 1 gram packet of Sweet'N Low contains 30 mg saccharin and nutritive dextrose, cream of tartar and calcium silicate for bulk, color and texture.

Aspartame, sold as Equal and Nutrasweet, dominates the world low-calorie sweetener market with 44% market share. It was discovered as a novel sweetener in 1965 and transiently entered the U.S. market in 1974, but the FDA suspended use for further safety testing. When no link to cancer or disease was found, the FDA approved use in solid food in 1981 and soft drinks in 1983.

Aspartame is 200 times sweeter than sugar. An international committee of experts set the acceptable daily intake of aspartame at 40 mg/kg body weight per day. For a 150 pound person, that would be 68 packets of Equal daily. Sounds bizarre, but some people do it.

It's hard to tell how much you have consumed, because many products sweetened with low/non-caloric sweeteners don't tell you how much is in them. They don't have to if the quantity is less than a gram and a1 gram (1000 mg) Equal packet contains only 40 mg of aspartame. The other 960 mg is maltodextrin and nutritive dextrose.

Aspartame is basically two amino acids (natural protein building blocks) linked to each other and methanol. The body metabolizes the amino acids as protein, supplying 4 calories per gram, but aspartame is so sweet you can get your sweet fix for a fraction of a calorie.

People have worried that aspartame causes disastrous health problems because of its breakdown products. Whether or not aspartame spontaneously breaks down in

Continued on page 6

Constipation, Bloating, Diarrhea, Pain - Irritable Bowel Syndrome

www.drgsmedisense.com *September 2008*

Bottom line at the top: Irritable bowel syndrome is probably a number of diseases that cause similar, distressing, bowel symptoms that are difficult to treat. This article offers a little enlightenment and a few ideas for relief.

The enigma of irritable bowel syndrome (IBS) frustrates both patients and doctors. We don't know exactly what it is or why it occurs. People also call it spastic colitis, though pathology shows no real colitis (inflammation).

IBS is abdominal pain that is associated with some change in bowel movement pattern or consistency. In every day practice, any patient who has abdominal pain plus 1) nausea, bloating, uncomfortable gas churning, constipation and/or diarrhea; and 2) no alternative diagnosis after a full evaluation, including colonoscopy has IBS.

The misery affects millions, most of whom are undiagnosed. Fourteen to 24% of women and 5 to 19% of men have the problem, leading to millions of physician visits and medication prescriptions each year. These patients have poorer quality of life, higher health care utilization, greater disability and three-fold higher absentee-ism from work.

The problem resolves in as few as 5% of IBS patients within 5 years. Symptoms wax and wane and may change in character over time, but usually remain

Continued on page 8

"Non-Caloric" sweeteners *continued from page 5*

food and beverages depends on its exposure to acid, heat and water. It is very stable as a dry powder, when frozen or dissolved in a moderately acidic solution at room temperature. The dry powder tolerates high heat.

In solutions outside aspartame's stable pH range (3.4 – 5), it degrades to its two component amino acids and methanol. Some sodas have a pH lower than the stable range allowing aspartame to degrade very slowly at room temperature, and much more quickly if stored above body temperature.

Pre-consumption degradation leads to loss of sweetness, but doesn't affect the body, because our stomach acid and digestive enzymes completely break aspartame down anyway. No aspartame is absorbed intact into the body. The amino acids and methanol are absorbed just the same as they would be if they had not come from aspartame.

Aspartic acid and phenylalanine mix in with all the other amino acids we get from food proteins. Theoretically aspartic acid might trigger certain brain receptors, but the human body disposes of aspartic acid so fast that blood levels don't rise even after large doses of aspartame.

Phenylalanine levels rise modestly after high aspartame doses, as they would with a meal. Initial fears that elevated phenylalanine levels might affect brain chemistry haven't panned out. It should not be used by people with phenylketonuria, a rare genetic disorder.

People worry most about aspartame's methyl group which converts to methanol, then to formaldehyde, and then to formic acid and CO_2. Formaldehyde is a carcinogen. Over 200 studies of aspartame's safety have not found that it causes cancer. That may be because of the very small quantities ingested, and the speed with which the body absorbs, breaks down and excretes methanol by-products.

Diet drinks generate less methanol than does fruit juice. Fruit or tomato juice contains 4-6 times more methanol than does an aspartame-containing diet drink. The body can't tell whether methanol comes from aspartame or fruit juice, so the outcome is the same.

Only a huge slug of aspartame (>50 mg/kg body weight) would produce detectable blood methanol levels. It takes a methanol dose of 200-500 mg/kg body weight to induce visual and nervous system toxicity, 50-100 times what people usually ingest.

Methanol in large amounts (as in grain alcohol) may cause headaches. Some people say that aspartame gives them migraines. That may be so, but well-controlled studies of

people who believe they have aspartame-induced headaches find just as many headaches as with placebo.

More than 200 toxicological and clinical studies have been conducted over the past 30 years, almost all of which have confirmed the safety of aspartame. Regulatory agencies in 130 countries have reviewed aspartame and found it to be safe. Most scientific organizations that have weighed in on the question have come to the same conclusion, including the American Medical Association, the American Dietetic Association, the American Diabetes Association, and the American Cancer Society.

Neotame's structure is similar to aspartame, but is 7000-13,000 times sweeter than sugar and does not lose its flavor when cooked. Though not available as a table-top sweetener, the food industry uses it in diet shakes, dairy products, frozen desserts, gum and baked goods. It is FDA approved.

Sucralose, better known as Splenda, is the first artificial sweetener made from natural sugar (sucrose). The FDA approved it on April Food's Day, 1998. Sucralose has a key molecular structure that makes it similar to, yet different enough from sugar to be 600 times sweeter. It has no calories because we don't absorb most sucralose from the gut into our bodies and what little does enter the bloodstream leaves, unchanged, through the kidneys.

Though chemically related to sugar, it does not mimic sugar's taste. Splenda tastes different enough that diet sodas containing it have lost market share and were re-launched with aspartame. It does have sugar's texture and bulking properties that make it useful for baking and confectionery products. On average, humans consume 1.1 mg/kg/day of sucralose.

People claim to experience numerous adverse effects from sucralose, but they are not confirmed in randomized, controlled trials. There is a single proven and published report of sucralose causing migraine.

Continued on page 7

"Non-Caloric" sweeteners *continued from page 6*

Since the body does not absorb sucralose, it may be fermented by gut bacteria, leading to abdominal pain, bloating, gas, and nausea. Large sucralose doses shrink mouse thymus glands and enlarge rat colons, but no cancer inducing, birth defect causing or nerve or brain toxicity effects have been seen in animals or humans.

Tagatose, also call Naturlose, is a naturally occurring sugar only partially absorbed by the human digestive system. Because much of it doesn't make it into the body, tagatose supplies fewer calories than regular sugar. It is a low (not zero) calorie sugar substitute, because the body metabolizes the fraction that the gut absorbs as if it were fructose, yielding 4 calories per gram.

Tagatose occurs naturally at low levels in heated cow's milk, other dairy products and the gum of *Sterculia setigera* (an evergreen tree). Bulk tagatose sweetener comes from chemically modified mild sugar. Because it is a naturally occurring sugar, the FDA has granted it "generally recognized as safe" (GRAS) status, without extensive pre-market testing. So far only 7-Eleven uses it in their Diet Pepsi Slurpees.

Tagatose's structure, sweetness and cooking properties are very similar to fructose. People with disorders of fructose metabolism should avoid it. People with metabolic syndrome should probably avoid it also (see DrG's MediSense, Vol 3-1 & 3-2.)

Stevia (Sweet Leaf or Honey Leaf) is short for *Stevia rebaudiana* Bertoni, a plant from Paraguay. It contains the natural sweeteners stevioside, rebaudioside A, B, C, D, & E, steviolbioside and dulcoside A. Stevioside is 300 times sweeter than sugar but provides no calories.

People use either the leaves or pure stevioside or rebaudioside extracts as food sweeteners. Manufacturers often combine stevia with fiber and sell it as a dietary supplement. Because it derives from a plant, the crude leaf is not subject to regulation by the FDA, even though we don't know the safety of whatever else is in the leaves.

Coca-Cola Co and PepsiCo are both rolling out beverage products sweetened with rebiana, shorthand for rebaudioside A. It supposedly tastes better than crude stevia. Food companies have asked the FDA to consider rebiana a dietary supplement with GRAS status. The FDA has not yet granted that status, or approved Cargill's non-calorie sweetener Truvia, made from stevia.

Short-term cooking does not affect stevia, but prolonged storage at body temperature degrades sweetness. Even more is lost with moderate heat in acid solution. Stevia has no after-taste.

Although stevioside has no mutagenic effect, a natural metabolite, steviol causes mutations in bacteria and rats. Metabolic degradation of steviol eradicates its cancer-causing potential. It is not clear to what extent the human body converts stevioside to steviol and how rapidly steviol disappears from the body.

Acesulfame K is a synthetic sweetener marketed as Sunett and Sweet One. Its stability when heated or dissolved in acid makes it suitable for use in cooking and in products with long shelf-life. Discovered accidentally in 1967 by a German food chemist, it is 180-200 times sweeter than table sugar.

Its bitter aftertaste has led Kraft Foods to combine it with sodium ferulate to mask the bitterness. Other food manufacturers blend it with other sweeteners to make it taste more like sugar and cut the aftertaste.

Critics of acesulfame K say the chemical has not been studied adequately and may be carcinogenic. The U.S. Food and Drug Administration and equivalent authorities in the European Union believe the safety data are compelling enough to allow its use. ⚕

Constipation, Bloating, Diarrhea, Pain - Irritable Bowel Syndrome *from page 5*

chronic without weight loss or loss of life. Alarmed by persistent misery, it is not uncommon for someone with a 20 year IBS history to continue to doctor-shop, trying to find the cure. Once the initial medical evaluation is done and a diagnosis is made, performing repeated diagnostic studies is of little value.

While it is easy to say a disease that has lasted 20 years without killing someone is benign, early in the disease no one knows whether the symptoms are benign or not. Weight loss, onset of symptoms after age 50, night-time symptoms that interrupt sleep, rectal bleeding, anemia and onset after antibiotic use, should raise suspicion of something more than IBS, prompting a more extensive evaluation. Some basic tests, like a full blood count, liver enzymes, sed rate, endomysial antibodies, colonoscopy, stool cultures and liver imaging can rule-out more ominous disease.

Causes: IBS is probably not one problem, but rather a gmish of as yet unidentified clinical entities, united by their common symptoms.

A relatively recent advance identified gluten enteropathy as the real problem in many people who had been diagnosed with irritable bowel. In this disease antibodies to wheat attack the lining of the bowel, causing it to malfunction. In the past we believed that this disorder, also called celiac sprue, caused severe diarrhea and wasting. Now we know that less severe cases manifest as irritable bowel-like symptoms, without necessarily causing weight loss or diarrhea. The disease is treatable, and shouldn't be missed.

Most IBS patients do not have gluten enteropathy and have no explanation for their symptoms. Those people suffer while waiting for the next breakthrough in diagnosis and treatment. For now, current theory suggests that IBS is due to any or all of 1) abnormal bowel contractions, 2) hypersensitivity to normal bowel activity, 3) disrupted bacterial balance and 4) an abnormal nervous system to gut connection.

Most people are not born with the problem. IBS appears to run in families, but the likelihood that a relative of a patient will also have the disorder is less than 35%. The bowel of some (not all) IBS patients doesn't move normally. Normal movement occurs in waves, from near end to far, so as to propel digesting food from your stomach to your rear end. IBS colons either don't contract enough or have uncoordinated, ineffective contractions that leave the contents churning but not moving.

About half of IBS patients have "visceral hyper-sensitivity", meaning they feel discomfort with normal contractions and distention more easily than a non-IBS person. Having a lower pain threshold predicts only severity of pain, not bloating, diarrhea or constipation. The site of increased sensitivity does not necessarily match the location of symptoms, so there is more to IBS than just hypersensitivity.

About a quarter of patients with IBS start to have symptoms after acute gastroenteritis. An infection, with its attendant inflammation, can alter the GI nervous system, causing muscular dysfunction and hyperexcitability of sensory neurons (visceral hypersensitivity). Such infection might also alter the colonic immune system and its resident bacteria.

The GI tract has a nervous system that controls most function, including contractions, acid secretion, and sensation. We are not usually aware of this nervous system, which is the same system that keeps us breathing and controls our heart rate without thinking about it. It has two competing components, one which speeds-up and the other which slows-down. IBS patients seem to have an imbalance of these two.

Serotonin (the neuro-hormone associated with depression) plays a crucial role in gut function, affecting movement, intestinal secretion, sensation and the link between the brain and nerves in the gut. Some people believe that excessive serotonin causes IBS symptoms, including both diarrhea and constipation. IBS patients have increased serotonin levels, especially after meals, but not necessarily coincident with symptoms.

IBS often has a significant psychological component, possibly working through the nervous system. Even people without IBS experience the brain-bowel nervous connection, which may make its presence known at most inconvenient times. Being away from home or out camping (especially first-timers not comfortable with aiming for a hole) constipates many people. Others get diarrhea when anxious before a race or performance.

Irritable bowel symptoms seem to be augmented at times of anxiety or psychological stress. Patients with IBS symptoms have more depression, anxiety, and perceived stress when compared with the general population. They pay more attention to gut symptoms that others may barely notice and may perceive pain with more distress.

At least a subgroup of patients have a disrupted intestinal bacteria balance. This may change the amount of gas produced, disrupt the colonic cell lining, and/or affect the colon's immune system (see We Need Our Bacteria in the

Continued on page 9

Constipation, Bloating, Diarrhea, Pain - Irritable Bowel Syndrome *from page 8*

June 2008 issue). By definition, the colon is not inflamed in IBS, but occasionally a few inflammatory cells are seen on pathology. Mild inflammation might alter function and sensitivity.

Treatment: IBS is difficult to treat because we don't know what causes it. Because we use a single name to label a group of diverse conditions that happen to have related symptoms, it is unrealistic to expect that one drug will cure everyone, especially those with opposite symptoms. This is probably the reason that clinical medication trials, that lump everyone together, often don't show a benefit.

If we understood and could identify patients with different underlying causes of IBS, we might be able to identify treatments that work for each type. But we don't. We basically treat to control symptoms, with the overriding goals of alleviating the patient's abdominal discomfort and enabling them to function in society.

Food: Every IBS patient wants to know what diet will relieve their suffering, having noticed that certain foods aggravate symptoms. Unfortunately no one diet cures all, because foods that help or hurt one person may be irrelevant to another. Common culprit foods include lactose (milk sugar), wheat products, fiber, simple sugars (fructose, xylitol, sorbitol) and caffeine. Peppermint, chamomile and fennel may help.

The food most association with bowel movements is fiber. IBS patients tend to complain more about normal fiber-induced bloating and gas than do non-IBS people. For some, high fiber foods bulk up the stool, regulated frequency and relieve constipation or diarrhea. At times, though, it aggravates symptoms because it doesn't necessarily push the stool through the bowel more quickly – all the new bulk just sits there and makes the misery worse. It may increase gas and bloating. Treating with high dietary fiber rarely 'cures' IBS.

Diets should be balanced, not top-heavy in any one type of food. If you suspect symptoms after a particular food, eliminate it for a while to see. This can be taken too far, though: I have anxious patients who blame so many foods that they eat virtually nothing. They waste away, when their real problem is hyper-sensitivity after all food.

Occasionally a true food allergy causes symptoms. You might see an allergist to be tested. Avoiding specific foods may improve symptoms, but rarely cures the underlying IBS.

Medications: Since IBS often starts after a diarrheal illness, probiotics (see *Probiotics* article, June 2008 issue) are a logical treatment, to re-establish a healthy bacterial balance. A combination probiotic works better than a single bacterial type. Not everyone responds.

Anticholinergic drugs, which work on the gut nervous system, may help some patients who have diarrhea and pain. Tricyclic anti-depressants, may help three ways: through their anti-cholinergic effects, by blunting pain perception and by alleviating anxiety, but they can aggravate constipation and bloating. Some people improve with other anti-depressants for unclear reasons. Whether or not someone is depressed does not predict success with these drugs, which might be tried in anyone.

Bowel relaxants often calm cramping and ease pain, but might make constipation worse. Doctors commonly prescribe dicyclomine, the only colonic muscle relaxant available in the U.S, and people often feel better, but are not cured by it. Loperamide, an anti-diarrheal agent that reduces intestinal activity, may alleviate diarrhea, urgency and frequency, but obviously won't help constipation and might aggravate abdominal pain and distention.

Some drugs increase intestinal contractions, helping the bowel to push stool on through. They may deflate distention, but these drugs have problems. Metoclopramide might induce life-long bizarre and incontrollable movements. Domperidone is available only in Canada. Cisapride was removed from the market because it kills people, and use of tegaserod, with similar problems, is limited to young women with constipation.

Anti-emetics might help the nausea. Occasionally patients who complain of "ulcer-like" pain in addition to their IBS symptoms respond to stomach acid blockers. Herbal preparations, acupuncture and enzymes do not produce consistent relief.

Other remedies: Cognitive behavioral and psycho-dynamic interpersonal therapy improve coping. In some, hypno-therapy or relaxation techniques reduce symptoms. In one study, psychotherapy was clinically effective in improving symptoms and pain perception even though the gut's basic function didn't change. ⚕

Healthy Choices for Mind and Body Products and Services

"Healthy, Happy Shapes, It's Not How You Look, It's How You Feel"

35 minute video and set of 5 lessons. Each lesson accompanies a discrete section of the video. The 5 topics are Body image, Healthy Nutrition, Physical Activity, Psychological issues predisposing to eating disorders and Dangers of Eating disorders.

"Positive Body Image and Healthy Bodies" WINS Grade School Lesson Sets

Each containing lessons that address healthful eating, physical activity, self-esteem, media image vs. reality, and natural body shape acceptance.
Grades 1 & 2: Lesson book, teacher background information with video, & classroom posters.
Grades 3 & 4: Lesson book, teacher background information with video, student video & classroom posters.
Grades 5 & 6: Lesson book, teacher background information with video, before and after pictures that illustrate photographic touch-up techniques & classroom posters.

Classroom and community talks for all ages.

Archived WINSNEWS newsletters that serve as a positive body image reinforcement for those suffering and recovering from eating disorders – Available on request

Booth posters and educational activities for health fairs.

Disclaimer

Think first, before you act: Because you are an extraordinary manifestation of a tangle of unique genetic material, think first, before applying any or all of this newsletter's information to your life choices. Dr G's just trying to interpret medical and nutrition news for you - within the framework of information already known and the limitations of how the studies were done. Articles this size can't possibly contain every bit of information published on a subject.. Distillation may leave some things out: Hopefully not crucial pieces. Don't crucify me if some new tidbit of information comes along that contradicts what I wrote. This newsletter offers some insight, not The Cure. PLEASE discuss any changes in therapy or lifestyle with your doctor. Subscribing to this newsletter presumes that you accept your own risk when making decisions about your health. Feel free to send questions or comments. Feedback and change are good.

Support Healthy Choices for Mind and Body and its work through WINS and DrG'sMediSense Newsletter with a donation of any size.

Donor: $35 or more: You will be listed as a Sponsor in DrG'sMediSense Newsletter.
For $50 or more you will also receive a free "Life is Worth Living" bracelet, and a mailed copy of DrG'sMediSense Newsletter

Healthy Choices Advocate: $100 or more: All of the above, plus a free "This is a Natural Shapes T-shirt and WINS video/lesson set donated to the organization of your choice.

Healthy Choices Special Friend: $150 or more: All of the above, plus VIP entry to Healthy Choices for Mind and Body events.

Healthy Choices Education Patron: $500 or more: All of the above, plus a talk by Dr Gerhardt to the group of your choice (plus travel).

Contact HCMB at algerhardt@sbcglobal.net for information about advertising sponsorship in DrG'sMediSense Newsletter, or leave a message at 916-457-3466

Name _____ Telephone _____

Address_____

Email _____

Donation amount _____

Make checks payable to:
Healthy Choices for Mind & Body
P.O.Box 19938
Sacramento, CA 95819

I do ___ do not ___ want my name listed as a sponsor in DrG'sMediSense Newsletter.

Donors of $100 or more: I do ___ do not ___ want a "This is a Natural Shape" t-shirt.
Specify size: Small ___ Medium ___ Large ___ XLarge ___

We will contact you for the name & address of your recipient for educational material.

Donors of $150 or more: Look for your invitation!

Donors of $500 or more: We will contact you to schedule Dr Gerhardt's talk.