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Volume 3 Number 1 November 2007

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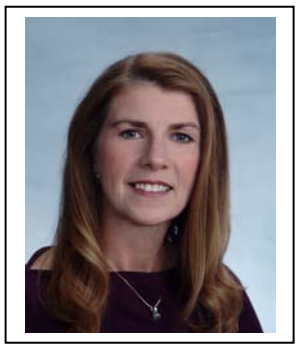

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## Contents:



## ALL CALORIES ARE NOT CREATED EQUAL *by Ann Gerhardt, MD* 11/28/07

*Subscribe at* algerhardt@sbcglobal.net

**Bottom Line at the Top: High fructose corn syrup, now a nearly ubiquitous food sweetener, is bad for your health.**

For years nutrition scientists said that a calorie is a calorie, and consuming too many or burning too few causes obesity. Bits of evidence refuting that axiom are trickling into nutrition science. For a long time research has focused on fat vs. carbohydrate, but hints that fructose (a sugar) contributes more than glucose (the 'bad' sugar in diabetes) to insulin resistance, fat and diabetes surfaced years ago. Scientists uncovered unsuspected effects of fructose on a variety of metabolic processes, which remained obscure pieces of information with unknown cause and effect until recently.

Now we know much more. We know that fructose increases enzymes (the worker-bee proteins of the body) that make fat. We know that fructose turns off at least three

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## DON'T JUST SIT THERE, HELP SCIENCE!

Paul Williams PhD of the Lawrence Berkeley National Laboratory invites you to participate in the National Runners and Walkers Health Study and promote your own health while doing it. You don't have to be an addicted or exemplary athlete to help with his exercise research. I've been a part of the study for years, filling out questionnaires about my physical activity, injuries, diet and health. It has been interesting in that, while I think I haven't really changed much, filling out the form makes me realize that I'm answering the questions differently each time.

Log on to http://exercise.lbl.gov to sign up. Use the website to choose an anonymous partner with whom to work out, create teams to compete, or track your mileage on a virtual trip across the U.S. The program generates email reminders to exercise and allows you to record your mileage. So get fit and help science at the same time!!

## All Calories Are Not Created Equal

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Of the body's mechanisms to keep blood vessels open and flexible. We know that it affects hormones that reduce insulin's effectiveness. We know that eating excess fructose leads to high uric acid levels, which contribute to high blood pressure.

For those of you who think I've lost my marbles and am making this up, I may have lost my marbles, but I'm not making this up – A lot of this data is very recent and not widely disseminated yet. **All of these metabolic consequences of fructose feed into the Metabolic Syndrome, the constellation of abnormalities that eventually leads to diabetes, high blood pressure, obesity, abnormal cholesterol levels and heart disease.**

Fructose, a very common sugar molecule, constitutes half of sucrose in beet- or cane-derived table sugar. The other half is glucose. In addition to beet and cane, fructose occurs naturally in honey, fruit, maple syrup and corn. Fructose tastes sweeter than sucrose or glucose.

In 1957 Richard O. Marshall and Earl R. Kooi developed a process whereby an enzyme (glucose isomerase) turns corn sugar's glucose into fructose. The resulting 'high fructose corn syrup' (HFCS), with up to 90% fructose, tastes sweeter than table sugar. In 1971 Japanese researchers figured out how to mass produce HFCS, which made it very sweet *and* very cheap. Since the USDA subsidizes corn agriculture with price supports that foster over-production, we have sustained corn excess and a very cheap route for sugar to your stomach.

**HFCS entered the food chain in the mid-1970's. With sweeter sugar, food manufacturers don't need to use as much, making sugary food even cheaper to make.** By the 1980's HFCS-sweetened sodas and juices had flooded the market. Food manufacturers switched to HFCS to sweeten any processed food. Big Gulps replaced 12 ounce Dixie cups. Even yogurt and tomato ketchup, two foods that I somehow thought would be 'pure,' contain HFCS.

The timing couldn't have been worse. Public health nutritionists, promoting very low fat diets to lower cholesterol, could not predict the effect of HFCS because it hadn't existed before. Sugars are part of the carbohydrate family, so high carb, sweet foods proliferated in the fat phobic 1980's, when everyone thought that carbs were 'good'. Contrary to the low fat promise, though, people's waistlines expanded rather than contracted.

**It is no coincidence that the obesity epidemic and soaring rates of childhood diabetes and adult metabolic syndrome took off in the 1980's.** The National Health and Nutrition Examination Survey, an ongoing project of the



Centers for Disease Control, documents the dramatic ballooning of Americans' weight. The 1960-1962, 1971-1974 and 1976-1980 surveys produced consistent levels of obesity and healthy weights. In each of those surveys, about 12% of men and 17% of women were obese and about 46% of men and 53% of women were in the 'desirable' weight range.

That all changed with the 1988-1994 survey, in which obesity jumped to 21% in men and 26% in women, and kept on climbing to 27.5% in men and 25% in women in 1999-2000. The rates of overweight but not quite obese are even higher. Obesity is defined as having a Body Mass Index (BMI) greater than 30. BMI expresses weight in proportion to height. Desirable is 18-25.

What does this have to do with you? Everything, if you are diabetic, overweight, or hypertensive, or if you have friends or relatives with those problems. You might care that the childhood diabetes epidemic will affect Americans' productivity and longevity for years to come. If nothing else, the growing public health consequences impact your insurance rates.

**Your choice of soda vs. tea or milk just graduated from "empty vs. healthy calories" to "damaging vs. OK".** Perhaps the most insidious aspect of fructose is that it drives its own consumption. Excess glucose tells the body "enough already!" and the enzyme that degrades it stops working, at least for a while. That doesn't happen with fructose. Its enzymes turn on and the body churns any huge amount you give it into energy or fat. Unless those calories are burned during physical activity, most will end up around your middle before they cause disease that kills you.

A calorie is not a calorie, metabolically. Just like the total fat number doesn't tell you how much 'bad' saturated and 'good' mono-unsaturated fat there is, carbohydrate and sugar totals doesn't tell you the source of sugar. **Your food label-reading chore now must extend to the ingredients section.** You get to make a choice between cost and health when you see the words HFCS or high fructose corn syrup.

## TEACHING MEDICINE IN PERU, REVISITED

*by Ann Gerhardt, MD*

*Subscribe at algerhardt@sbcglobal.net* 11/28/07

A 63 year-old woman who looks 80 comes to the hospital for a broken arm. Unfortunately it broke because tumor dissolved a large section of the bone. The chest xray shows the probable cancer's primary location – Her left lung is largely replaced by scarring and pockets of fluid. The symptoms of cough, shortness of breath and fever weren't enough to propel her to a doctor earlier.

Private doctors are expensive, the clinics are packed and too many people avoid the medical system. In spite of Social Security's Es Salud health system, which covers employees, retirees and their families, a huge number of Peruvians have no health insurance. Many die undocumented deaths at home.

A lot has changed since I last taught medicine in Peru in 2007. Unfortunately, patients like this one haven't. AIDS and infectious disease are huge problems. Delayed or inadequate out-patient care is all too prevalent. The good news is that the top medical doctors at Hospital Almenara are excellent infectious disease experts.

**Now the good news:** Drugs are cheap. My friend Ricardo told me that they never see vitamin A deficiency, the world's leading cause of childhood blindness, because everyone takes dirt-cheap vitamins (the other reason may be that hundreds of varieties of fruits are available, even to the very poor). Because most patents aren't protected and each brand name U.S. drug has multiple knock-offs, most medications are inexpensive.

Many more patients are being fed through tubes into the stomach or small bowel. In the U.S. it seems harder to get doctors to push for and patients to accept tube feeding to correct and prevent malnutrition, even though it is far healthier than IV feeding. Peruvian doctors seem to be ahead of the curve in this regard and their patients argue less with doctor recommendations, so feeding by tube happens. It's just a shame that so many patients are severely malnourished on arrival at hospital.

Last year I saw many patients with stable disease who were waiting for tests and results. This year I had the impression of very sick patients being managed more quickly and aggressively. CT scans now take days, not weeks, and in some cases the laboratory reports results in hours, not days.

**It's still Peru, though**, and who you know can make a difference. We had been waiting for days for a follow-up CT scan on a very sick man with AIDS and dead tissue in his liver and abdominal lymph nodes. The medicines for a presumptive diagnosis of TB didn't seem to be working and his liver was failing. I mentioned the CT problem to the frantic family who intercepted me in the hall. His wife, who knows the head of the CT department, ran off to make it happen. He died that night.

Post-hospital care is a problem. Care facilities exist but no insurance pays for them. We had a number of patients whose families just couldn't manage: The unresponsive lady with two brain hemorrhages; the 85 year old man crippled by Parkinson's disease, severely scarred lungs and back pain; the emaciated 77 year old whose cardiac surgeons refuse to replace a heart valve until he's well nourished – All need comprehensive out-patient care and feeding. Without a family competent and willing to provide the care or rich enough to pay for it, the patient stays in the hospital or dies outside of it.

**This year's teaching for two weeks at one hospital went SO much better than last year's format** of two one-week visits to different hospitals. Last year, my first week at Hospital Rebaglioti conditioned me to expect wary doctors who wanted to prove their competence. They didn't seem to know what to do

***Peruvian doctors listening attentively***

with me, so I had free time to explore Lima. When I switched to Hospital Almenara, Rebaglioti's conditioning made me timid about integrating into Almenara's system. I gave lectures, but wasn't sure how much impact I really had.

This year, my two weeks at Almenara gave me time to teach one set of doctors much more and actually apply some of the information to real patients. Those doctors will pass on the information to residents and students.

I gave a lecture almost every day, then saw patients with the

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## ASPIRIN CONUNDRUM *by Ann Gerhardt, MD*

*Subscribe at algerhardt@sbcglobal.net* 11/28/07

**Bottom Line at the Top: If you are at risk for stroke or heart or vascular disease, take your low-dose aspirin every day. Resistance may exist in diabetics, the elderly and women, but higher aspirin doses don't work better.**

Daily low-dose aspirin prevents many heart attacks and strokes. But artery-clogging is a complex process and patients taking aspirin continue to suffer recurrent events. Not even aspirin is simple. **Scientists have recognized between-individual aspirin responsiveness for over 40 years.** A flurry of recent research activity concerning platelets, aspirin and other 'blood thinners,' attempt to sort out why, but many questions remain unanswered.

Blood thinners do not really thin blood flowing through arteries and veins. They prevent the process by which blood changes from a flowing slurry of cells, proteins and nutrients into a congealed solid clot. Clots may stop blood flow in veins, such as a leg clot that may travel to the lungs and kill. Or they clog arteries, cutting off the blood supply to the brain, causing a stroke, the heart, causing a heart attack, or other organs, killing whatever tissue no longer receives blood.

We don't really know how "thin" most people's flowing blood is. As long as it moves quickly along, coursing through arteries and veins without dallying along the way, we can presume that few micro-clots exist. Some people with a genetic predisposition to clotting may experience intermittent, devastating loss of a tissue when random clots close off its blood supply. For most of us, problems don't occur until



blood flow slows and stagnates. This occurs when the heart pumps poorly (as in aneurysm or atrial fibrillation), or when part or all of the body is immobilized (as in long airplane flights or bedridden patients). Exercise and muscular activity produce the opposite effect, pushing blood along through blood vessels.

A clot typically contains platelets, stuck together in an aggregated clump, and fibrin, an insoluble protein that forms a type of scar tissue in clot. More than one stimulus can set off a variety of types of reactions that lead to clot. **"Blood-thinning" drugs come in two types: Those that act on platelets and those that prevent fibrin activation. Each of the drugs acts on a slightly different step in the process, and their effects are often additive.** Certain supplements and herbs, including garlic, ginseng, ginger and ginkgo and high doses of vitamin E and fish oil, have anti-coagulant or anti-platelet activity.

Aspirin blocks platelet aggregation and clot by inhibiting cyclooxygenase-1 (COX-1). Platelet COX-1 converts arachidonic acid to thromboxaneA2, which stimulates platelets to clot. Aspirin permanently inactivates COX-1 of platelets, rendering them useless for blood clotting. Once blocked by aspirin, the effect lasts the lifetime of the platelet (8-10 days) and recovers only by making new ones.

When taken by mouth, aspirin starts inactivating platelets as soon as it is absorbed into the portal vein (the blood vessel from the intestine to the liver), long before any reaches the rest of the body. It takes 60 minutes for maximal effect after swallowing a pill whole. Chewable or liquid aspirin is absorbed much more quickly, with maximal platelet inhibition within 30 minutes.

A single, chewed, 162 mg dose quickly inactivates most of the body's platelets. **This is why a person with a heart attack or stroke should immediately take 162 mg aspirin even before arrival in the emergency room. Higher or multiple doses are unnecessary and incur greater bleeding risk.**

To sustain the effect requires only 81 mg per day… At least in most people. Doctors have identified a phenomenon of 'aspirin resistance,' in which patients have a second heart attack or stroke even while on aspirin, and their platelets seem to be immune to aspirin's effect. Depending on the study and assay method, as few as 5% and as many as 65% of people are at least mildly aspirin-resistant.

This phenomenon has upset the apple cart concerning understanding aspirin dosing. If people can be resistant to aspirin's effects, one would expect large population trials to have shown that higher doses work better. This is unequivocally not the case. **No one has found any evidence that increasing aspirin dose confers more platelet inactivation or fewer heart attacks. Almost all trials favor a low, 50 - 81 mg dose for optimal effect.**

So how can aspirin resistance and low-dose-works-best coexist? Possible explanations are: 1) Aspirin-resistance is

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**ASPIRIN CONUNDRUM** *continued from page 4*

not really a significant problem; 2) There is more to platelet inhibition than the COX-1 pathway; and 3) High dose aspirin is somehow harmful. The answer relates to all three.

First: **Careful study of aspirin resistant people shows that most of them are not taking it every day or even at all.** It is hard for the drug to work if someone doesn't take it. Some people use enteric-coated aspirin, which blocks aspirin absorption to some extent, so it doesn't work as well. Others are taking other anti-inflammatories, which sit on COX-1 in such a way that they block aspirin's effect. True aspirin resistance is very rare.

Second: The COX-1-mediated, aspirin -sensitive path is not the only way to get platelets to aggregate. Platelets can be stimulated to clot by mechanisms other than COX-1-dependent thromboxane production, so someone taking aspirin may have a heart attack even if the aspirin is working perfectly well. Genetics influence platelet reactivity, with some people's platelets clotting much more easily than others. **Those who have the most readily clottable blood prior to any blood thinners have the greatest risk of a recurrent heart attack while on them.**

Third: Aspirin has more than one effect on blood vessels – In addition to blocking platelet COX-, it affects arterial walls by inhibiting COX-2. Normally COX-2 in blood vessel walls makes a good substance, prostacyclin, that opens the vessel and blocks clogging. By blocking COX-2, aspirin cuts off prostacyclin production, leading to blood vessel constriction and clot. It takes much higher amounts of aspirin to block COX-2 than COX-1. **So *low* dose aspirin is much more likely to inhibit COX-1-induced platelet clotting and leave the beneficial COX-2 prostacyclin alone, which prevents heart attacks.**

Genetic factors control how likely a person is to clot while on aspirin. These genetic factors seem to affect non-aspirin-sensitive pathways to platelet clotting. No single genetic factor affecting platelets, including response to aspirin, determines whether or not an individual is likely to have a heart attack.

Some believe that diabetics as a group are less responsive and have more heart and vascular disease because the disease increases all pathways to clot, not just the one affected by aspirin. Differential aspirin sensitivity probably also makes a difference in the elderly and females. Aspirin inactivates their platelets less effectively compared to young males. The elderly incur many more strokes and vascular events. Platelet reactivity may be part of the problem.

Most trials proving that aspirin protects against heart attack and stroke studied men and doctors extrapolated those results to women. Subsequent studies suggest that women are not men who happen to have an X chromosome: Regular aspirin use by women seems to protect against stroke, but not as well against heart attack.

Heart attack and stroke prevention trials have used anywhere from 50 to 1500 mg aspirin daily and the US Food and Drug Administration recommends doses up to 1300 mg. Analysis of trials done through 2007 found that doses above 81 mg (a baby aspirin) confer no extra benefit, but induce many more bleeding complications.

Aspirin and other blood thinners are not innocuous. They not only inhibit the clots we don't want, but they prevent good clots, like when you don't want to bleed to death from a paper cut. In some, aspirin causes life-threatening bleeding from the stomach, bowel or bladder, a rather obvious inconvenience. The balancing act of clot vs. no clot has to be finely tuned to prevent both heart attacks and excessive bleeding.

Higher aspirin dose makes bleeding more likely, but some aspirin-sensitive people will bleed with baby aspirin. Extrapolating one trial's results to the 50 million U.S. people who take aspirin daily predicts that 900,000 more people would experience major bleeding episodes per year on 325 mg daily, compared to 81 mg.

Combining two blood thinners, like aspirin and warfarin or aspirin and clopidogrel, leads to many more episodes of serious bleeding. Studies comparing a combination with either alone show that each regimen cause the same number of deaths, just for different reasons.

Companies have capitalized on aspirin-resistance fear by developing tests to measure it. None of them are validated and none accurately and conclusively assesses a person's aspirin sensitivity and propensity to clot. The ability of these tests to predict cardiac events is entirely unknown. It follows that scientists have been unable to formulate diagnostic criteria for aspirin resistance and appropriate therapeutic response.

**There is no way to predict aspirin sensitivity. The tests for it are fraught with problems and studies uniformly favor low dose aspirin to prevent heart attack and stroke.** So why do doctors continue to prescribe 325 mg (the standard aspirin pill size) daily for vascular disease prevention? For some it is habit, while others can't believe that less is more. Others fear that a patient who 'failed' low dose aspirin and had another stroke or heart attack must be aspirin resistant and need more. What we need is more information from the ongoing research, and for high risk patients to take their 81 mg aspirin every day. ⚕

## GETTING THE MOST OUT OF YOUR DOCTOR – Emotions Cause Real Symptoms & Illness

*by Ann Gerhardt, MD*
*Subscribe at algerhardt@sbcglobal.net 11/20/07*

**Bottom Line at the Top: Emotions and psychological stress cause physical symptoms and disease and should not be ignored.**

A recent article in the Journal of the American Heart Association highlighted the cause and effect relationship between stressful events and heart disease. In the article patient vignettes illustrate how sudden cardiac arrhythmias or heart failure have followed severe emotional distress. One woman, who witnessed her husband's cardiac arrest, resuscitation and death, spent weeks in a coma and cardiogenic shock. It wasn't hysterical shock – she had real cardiac damage and almost died.

Disease resulting from emotional stress is not new. In the 1950's women were given Valium. Men were assumed to have no emotion-induced symptoms or illness because they presumably could control their emotions. Then doctors identified the connection between certain personalities types and heart disease. **Scientists noted higher cancer, heart disease and death rates in patients of either sex who had suffered major life stressors, like death of a family member, job loss, major relocation or loss of a home.** The mind-body connection became harder to ignore.

We know little about what causes the connection and even less about how to influence it to improve health. For now, doctors establish that your teenage daughter is the cause of your belly pain, feel their work is done and send you home to buck up and carry on. They (usually) are not un-caring: The doctor's black bag just doesn't contain get-a-life or just-deal pills.

The article goes on to explain the possible physiologic mechanisms by which psychological shock might induce cardiac decompensation. **Extensive hormonal, circulatory and regulatory systems monitor what's happening to and in our bodies all the time. Those systems respond in times of stress, theoretically to keep us alive and functioning.** Blocking them completely in order to prevent stress-induced disease might harm us. We need those systems for 'flight-or-fight' reactions that save us in near-miss driving mishaps and severe infections.

Scientists are working on approaches to modify our physiologic reactions to prevent disease. We already know that some stress-induced chest pain is due to blood vessel spasm that can be prevented with a class of blood pressure medications called calcium channel blockers. We know



that emotional tension can cause tension headaches, irritable bowel spasm and back and neck pain, treatable with muscle relaxants. We don't yet understand why or how stress induces spasm.

Will elimination of psychological stress solve the problem? Would a frontal lobotomy and heavy sedatives really prevent disease? Knowing how to interrupt the signaling network between stress and potentially damaging physiologic responses is stuff of the future.

**In the meantime, stop being embarrassed about your mind-body connection. We all have it. Some of us are more aware of it than others.** Those who deny that it exists are oblivious, arrogant or naïve. Acknowledging it as a cause of symptoms and medical disease could possibly lead to change that improves your existence. Pushing your doctor to help deal with the mind-body connection, rather than blowing it off, gives you an ally, rather than a critic. ⚕

### Peruvian Good News:

**Maybe it's my imagination, but I believe that Lima's taxi drivers drive less insanely. I didn't have to close my eyes as much. There are more traffic lights and people seem to stop at them more often. They've put speed bumps a few feet from intersections, to get drivers to at least slow down at stop signs, even if they don't stop. Lima's many sidewalks make pedestrian travel very convenient, as long as you don't mind risking life and limb when crossing a street.**

## SUPPLEMENT OF THE MONTH: COLLOIDAL SILVER *by Ann Gerhardt, MD*

*Subscribe at algerhardt@sbcglobal.net* *11/28/07*

**Bottom line at the top: Colloidal silver, taken by mouth, has no proven health benefit. It is NOT recognized as safe by the FDA and can cause long-lasting blue-gray skin and mucous membrane staining.**

Not long ago the New England Journal of Medicine published a picture of a young man's blue-gray face. He had 'argyria', skin discoloration from silver deposition. He had taken colloidal silver to make him feel better. His odd color wasn't hurting him, except to reduce his work options to freak show or Halloween character.

Colloidal silver is widely marketed as a dietary supplement for diseases like diabetes, AIDS, cancer, and various infections. It was used to treat infections prior to the antibiotic era, with limited evidence that it actually worked. Naturopathic doctors claim that pharmaceutical companies in search of profits sullied silver's reputation in order to promote their new antibiotics. In actuality silver preparations cost far more than the new and more effective sulfa drugs, so use declined.

The Food and Drug Administration, established in 1938, allowed silver to be used only in forms already in existence prior to that year. In 1991 the FDA banned silver promoters from claiming any health benefit, and in 1999 revoked colloidal silver's GRAS (Generally Recognized As Safe) status. It cannot be sold as an over-the-counter *drug* purporting to solve any health problem. It may be sold as a dietary supplement, but must satisfy the 1984 Dietary Supplement Health and Education Act, which requires that there be no health claims and only oral forms may be sold, to qualify as *dietary*. Why marketers continue to sell it over the internet with extensive health claims attached is unclear.

Silver promoters believe that colloidal silver, in contact with a virus, fungus or bacterium, "disables its oxygen metabolism enzyme," "suffocating" and killing it. It seems to affect the organism's ATP production, which is crucial to energy generation. Believers claim that colloidal silver is non-toxic to humans, insisting that it works on enzymes not present in humans and leaves human cells intact.

Silver nitrate is used on neonates eyes to prevent infections. Silver-containing antibiotic creams help to treat infections of burned skin, but recently were suspected of slowing healing. Colloidal silver in a solution of 3-5 parts per million can kill bacteria, so it is used as a topical antiseptic and to purify water. All of these uses require direct contact of the silver with organisms on some accessible surface. I've found no evidence that supports any anti-microbial or health benefit when silver is taken internally by humans or animals. Some test-tube experiments of colloidal silver solutions show no antimicrobial effect at concentrations that might be clinically relevant, casting doubt even on its use as an antiseptic.

Colloidal silver products vary considerably in content. Some have no silver at all, most have very little colloid and many have unsafe amounts of free silver, which increases argyria. Almost all lack chemical stability and purity. There is no way from the label to discern which might be safe and which aren't.

Argyria results from contact with or ingestion of silver salts from any source, including medication. The most common cause of argyria is mechanical deposition of small silver particles in the skin of people who work in silver mining or refining, industries manufacturing silver products and photographic processing.

Blue spots may appear at acupuncture needle and silver earrings sites. Habitual silver-based nose drop use may deposit pigment on both the nose and the nail beds. Silver-sulfadiazine cream, used to treat skin wounds and burns, may stain scars.

Generalized argyria often starts with gray-brown staining of gums, followed by diffuse, gray, metallic or blue-gray skin discoloration. The whites and conjunctiva of the eyes and the membranes of the mouth may turn blue or gray. Hyper-pigmentation is most apparent in the sun-exposed areas of skin, possibly because silver bound to proteins in skin are reduced to elemental silver by light. Abdominal organs turn blue, but only your surgeon would know for sure.

Great individual variability exists in the length of exposure and total dose needed to result in argyria. The rapidity and degree of staining after oral ingestion of silver-containing medications may correlate with how much free silver is in the 'colloid' preparation.

The normal human body contains approximately 1 mg of silver; the least cumulative amount of silver reported to produce generalized argyria in humans ranges from 4-5 g to 20-40 g. Much higher doses may be lethal.

## DENIAL SOLVES NOTHING *by Ann Gerhardt, MD, from an article submitted by Jane Robbins*

*Subscribe at algerhardt@sbcglobal.net 11/20/07*

*Working Mother* Magazine published a good article, titled "Catch It Early" about eating disorders in October. It succinctly summarizes the characteristics of and warning signs for anorexia nervosa and bulimia and highlights the need for rapid recognition and treatment.

One of the biggest obstacles to eating disorder recovery is denial that it exists. Patients obstinately assert that *other* people need to eat to live, but *they* can do just fine with 500 calories a day. For some it takes years of lightheadedness, heartburn, wearing layers in the summer to fight the cold, zero concentration and obsession with the scale, food and fat to decide enough is enough and get help. If they've figured out how to eat and drink just enough to function in society and stay away from the medical profession, they can starve and vomit their way into middle and even old age. They waste their life obsessed and hiding from reality.

Author Danielle Schlass Saliman's subtitle, "The earlier you can spot an eating disorder, the better chance you have of raising a healthy, unaffected child" cuts to the meat of the problem on two counts, *earlier* and *you.* She uses a positive example of a mother who sprang into action as soon as a counselor warned her of her daughter's suspicious behavior and weight loss. Because the person with the disease really doesn't want to recover, it takes a parent or other outside person to push an anorexic or bulimic into treatment. If a teen can get help within the first six months of practicing disordered eating, the recovery rate exceeds 75%, so there is no time to fiddle around debating whether there is a problem or not.

I can understand a patient's denial. After all, eating disorders are psychiatric diseases that serve a psychological purpose for the sufferer. What's incomprehensible is why a parent would choose to live in denial, ignoring the warning signs. The same parent who would demand immediate treatment for her child's fractured arm or life-threatening meningitis often remains blind to psychological and food problems. Some even welcome their child's weight loss – after all, in our society one can never be too thin…

There are many reasons why a parent might remain oblivious to a child's eating problems. Often eating disorders sprout from a family with unrealistic expectations of beautiful, perfect, accomplished children who couldn't possibly have a problem so unseemly as an eating disorder. Or the parent is overly controlling, expecting to be able to just tell the teen to eat and he will comply. Some parents are emotionally absent and not connected enough to notice or care that their daughter is wasting away. Others, overwhelmed with their own lives, can't deal with one more problem.

The mother in the article may not have recognized the warning signs on her own but was willing to respond quickly when alerted to the problem. Her daughter required two and a half years of intensive therapy, not uncommon for an eating disorder, and is doing well now.

Up to 20% of eating disorder patients die, often from suicide or heart rhythm irregularities. It is not a disease of volition. These patients lose control over their behavior and may spiral into serious, life-threatening illness.

Denial hardly ever achieves a positive outcome. In the case of eating disorders, it can be deadly.

### Warning signs of Anorexia Nervosa

Avoiding meals with others
Restricting food to 'healthy' or non-fat or vegetarian
Tiny portions, eating very slowly, pushing food around on the plate
Weighing frequently & being obsessed with calories
Stopping menstruation
Complaining of being fat when not
Overdressing and always feeling cold
Lightheadedness
Moodiness, depression, irritability
Fatigue, weakness
Exercise compulsion

### Warning Signs of Bulimia Nervosa

Eating large amounts of food quickly, but no weight gain
Food disappearing from the house
Bathroom breaks during or immediately after eating
Running water when in the bathroom and excessive toilet paper disappearance
Abdominal pain, constipation, laxative use
Exercise compulsion
Fatigue, weakness
Palpitations, chest pain
Dental problems
Moodiness, depression, irritability

**Teaching Medicine in Peru** *continued from page 3*

team. My Spanish rapidly improved, as I often listened to case presentations without a translator. Each day, having to give a lecture, listen and respond in Spanish and continually try to be smart was enough to exhaust my poor brain. A 6 hour work day left me prostrate in my hotel . . . At least until I could recover sufficiently for a racewalk around 'the Golf' and to dine on *excellent* Peruvian cuisine.

As a daily presence on the ward, I interacted more with patients and their families. Upon hearing my English, they eagerly sought my opinion, assuming the U.S. doctor could solve their problems. Most times I could only reassure them that their doctors were already doing everything possible within the constraints of their hospital system.

Occasionally I disagreed with the senior doctor about a plan of care. Usually they listened and adjusted course. Sometimes I lost the debate, usually because my course of action involved pressuring a consulting specialist into action. Consultants seem to descend on a patient, make a pronouncement and disappear forever, without much action. The separation of patients into wards based on their primary disease isolates general medicine doctors from specialists and surgeons. It's too easy for consultants to avoid follow-up, since their ward is in another part of the huge hospital.

Three of my lectures focused on individualizing nutrition prescriptions for patients with special needs. Unfortunately specialized nutrition formulae are only available through the Nutrition Service, which is separate from the Medicine Service. At least that was what I was told. I was also told that I shouldn't believe anything in Peru unless three independent sources corroborate it.

At least three doctors have asked me to return next year. I hope that Health Volunteers Overseas, my sponsoring organization, approves. ⚕

*Ricardo Illescas, MD, friend & translator*

**Many thanks to those who supported Peruvian medical education with donations to Health Volunteers Overseas!**

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Dr.G's medisense
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**Putting medical and nutrition news into historical, scientific and just plain practical context.**

# WiNS

## We Insist on Natural Shapes

Preventing eating disorders, Educating children and adults and Changing standards of beauty to accept bodies attainable with healthy lifestyles not defined by weight.

# HEALTHY CHOICES FOR MIND AND BODY

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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.

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