

MORE ON HORMONES

It's taken a long time, but the misty, fragmented knowledge I had about hormones finally has cleared. It comes back to the way we used to live, and the foods we used to eat, when we were still a fragile new species. Around us were plants that could nourish, cure, or kill us. We learned fast! Among them were phytoestrogens which worked two ways: boosted our estrogen when we needed it, or kept it down when it was too high. Also, good-tasting, easy to find roots provided saponins readily converted in the body into progesterone.

Women don't produce much progesterone after their ovaries stop making it at menopause, except for what their adrenal glands can whip up. Most men, on the other hand, keep churning it out pretty smoothly till very late in life. When we foraged in the original yam-filled 'gardens of Eden,' women (men, too) could boost their progesterone at will! (They still can in many parts of the globe where true yams, *Dioscorea* species, grow. Commonly marketed U.S. yams are sweet potatoes, a different species.)

In the modern western world, progesterone levels fall and, not so coincidentally certain autoimmune disorders rise *especially in women*. Rheumatoid arthritis and systemic lupus, for example, afflict women *nine times more than men*.

These are ailments with no known cure; adrenocortical steroid drugs (cortisone, prednisone, etc.) alleviate them for a while. *Our body makes all the natural adrenocortical hormones from progesterone.* Does that tell us something? We're long overdue on studies that examine

whether supplemental *natural* progesterone helps to prevent loss of adrenocortical hormones and in that way possibly protect us from autoimmune screw-ups.

I'd like to see research done on *what effect regular intake of yams (Dioscorea species) might have on autoimmune ailments too!*

To all doctors who've been blinded and seduced by the drug makers' 'Feminine Forever' con, please take note: *Provera and the other progestins cannot be converted to natural cortisone and cortisol.* Moreover, they fill up progesterone receptors, thereby diminishing synthesis of progesterone and the vital adrenocortical hormones even further.



On the first day of a 3-day San Francisco seminar in April on nutritional medicine, wonderfully taught in tandem by Jonathan V. Wright, M.D., and Alan Gaby, M.D., I sat next to a tall, amiable man who, like me, was busy taking notes. During breaks, I noticed other attendees (doctors, naturopaths, chiropractors, nutritionists, etc.) clustering around him, popping questions which he'd answer patiently as they followed him down the corridors. Only later did I learn he was John R. Lee, M.D., whose articles and book on natural progesterone have taken the alternative health world by storm. Me, too.* (*Natural Progesterone: The Multiple Roles of a Remarkable Hormone*, 1993. Ask for it at healthfood stores or book stores. Can be ordered from BLL Publishing, POB 2068, Sebastopol CA 95473. \$9.95 plus sales tax if appropriate and \$2

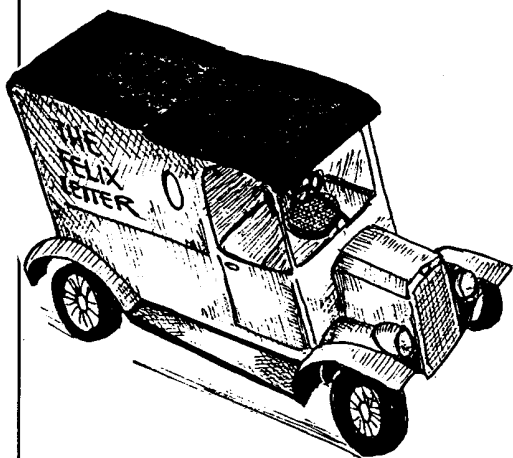
Since I wrote FL#76, I've been chasing down articles by Ray Peat, Ph.D., the biologist and college professor whose work with progesterone strongly influenced Dr. Lee. Dr. Peat has scathing things to

*Some months ago after reading *Natural Progesterone*, I began rubbing dabs of Pro-Gest® cream on my face, neck and other parts of my anatomy, as well as keeping drops of Pro-Gest® oil under my tongue for 5 minutes or more. Both are nonprescription health food store items containing extract of wild yam. By now, I don't think it's a placebo effect -- I simply feel more vigorous. I'm looking forward to maintaining bone mineral density or even improving it, as Dr. Lee's older women patients did.

With young women, dosages have to be more carefully applied in order not to interfere with normal menstrual cycles, as the book describes. But, wonder of wonders, in contrast to the terrifying lists of side effects for Provera etc., other than potentially screwing up menstrual cycles, natural progesterone has no dangers. *It's the only hormone given with complete safety to pregnant women.* M.D.'s and D.O.'s can order natural progesterone and natural estrogens in a variety of creams, capsules, and gels from Women's International Pharmacy in Madison, Wisconsin, 800-279-5708.

say about the folly of administering estrogen blithely (in contraceptives or hormone replacement therapy) without any understanding of its potential for harm (even natural estrogens) *unless ample progesterone is there to offset it as nature intended.* Dr. Peat says estrogen is a promoter of hypoxia (low oxygen) and aging in tissues *including the brain.* "Although estrogen is known to advance the aging of collagen in all tissues that have been studied, including skin, it has been promoted as a 'youth drug.' The beef industry uses it because it makes cows swell up with fat and water, to increase profits....Women, like cows, will puff up with water and fat under the influence of estrogen, and wrinkles will naturally be smoothed out, but the skin itself is actually losing its elasticity faster when estrogen is used."

Let's be careful out there! □



I HOPE THEY SERVE NONGLUTEN CINNAMON BUNS IN HEAVEN

Look, folks, I know many of us would rather die than give up our bagels, and I hate being a nag (hah-hah), but current research on gluten intolerance (celiac sprue) reinforces my hunch that it could be the missing clue in some of our stubbornest ailments.

Gluten is a complex mixture of protein fractions in the endosperm of seeds, i.e., grains, of cereal grasses. Only specific fractions (*prolamins*) seem to provoke the mischief known as celiac sprue, or celiac disease (CD). *The most rascally of these, the*

gliadins, are all too lavishly supplied by grains of wheat as well as by flours and most products made from wheat grains. (Alas, bagels, too.) Prolamins in rye and barley also are troublemakers for a majority of celiacs although a mite easier to avoid in our wheat-centered culture.

Fortunately, most species of cereal grains don't contain the kinds of prolamins that harm celiacs. Benign grains include rice, corn, millet, teff, sorghum. Oats are okay for many but not all celiacs. (Below I describe other 'safe' starchy foods.)

The terms in common use, "gluten," "gluten intolerant," etc. are misleading because endosperm in all cereal grains contains 'gluten' proteins which don't bother celiacs except in wheat, rye, barley, and sometimes oats. (Triticale, a hybrid of wheat and rye, also is a no-no, as are Spelt and Kamut, older forms of wheat.) Nevertheless, for simplicity's sake, "gluten" foods refer to those causing symptoms in celiacs, while "glutenfree" refers to grains, starchy vegetables, etc. that are considered safe.

While wheat is known to be a common allergen, a typical allergy to wheat doesn't usually follow the devastating course of true CD, i.e., the sinister destruction of membranes lining the small intestine. Somehow, gliadins or similar prolamins set off longlasting auto-immune alarms in gluten-intolerant individuals. The body's immune system keeps on attacking their gut membrane as if it were a foreign object.

Microscopic analysis of tiny biopsied gut sections in celiacs who aren't following a glutenfree diet shows characteristic "villous atrophy" -- flattening or loss of millions of tiny villi that allow us to digest food and absorb it. The result: *celiacs can't absorb enough nutrients.* Another consequence is abnormal intestinal permeability ("leaky gut"), allowing undigested food particles, toxins, and other garbage to ooze through the damaged lining *into the general blood circulation.*

No wonder celiacs run into a gamut of systemic malfunctions!

The good news is the damaged gut recovers on a glutenfree diet and a lot of other troubling symptoms fade into the sunset.



That's why I feel a sense of relief when I read new corroborative medical studies about strong connections between celiac sprue and some of the peskiest ailments around. For example *chronic rheumatic disorders*, i.e., arthritis, or tenderness and stiffness in joints and adjacent tissues, show up in many untreated CD patients. Wonder of wonders! -- *glutenfree diets worked very well to relieve this puzzling, obstinate disorder in a number of the studies.*

This leads logically to the conjecture that toxins leaking into the bloodstream would be responsible for all kinds of mischief, not just in joints, ligaments, and muscles but *in the big computer in our skull.* Moreover, we know chronic malabsorption means a dwindling supply of the nutrients needed for optimal brain function. It's not surprising, then (although not widely known in U.S. medical and psychiatric circles) that *specialists see depression so often in newly diagnosed CD patients, they consider it typical for the ailment, even in children.*

The most startling finding was the connection to *epilepsy in children* in a number of reports. Here's one by A. Ventura, F. Bouquet, et al., published in *Acta Paediatrica Scandinavica*, 1991 May, 80(5):559-62.

"Two cases of focal occipital epilepsy with cerebral calcifications poorly responsive to antiepileptic treatment are described. In both cases coeliac disease was diagnosed and folic acid deficiency documented. A glutenfree diet and brief supplementation with folic acid led to a complete EEG and clinical normalization in one case and to a significant improvement of EEG and seizure control in the other."

Another clue to give us pause: Finnish doctors describe 5 patients under 60 years of age who developed *presenile dementia* "and were subsequently found to have celiac disease (CD)." [*Alzheimer's disease is one kind of presenile dementia.*] *Neurology*, 1991 March, 41(3), 372-5.

As of 1988, approximately 1 of every 340 children in Sweden was diagnosed by two years of age with CD, making it one of the most common chronic ailments among Swedish youngsters. In Ireland, the incidence in adults and children has long been known to be at least 1 in 300.



Sneaky Celiac Sprue

Research continues on tests needed to identify *subclinical*, or "silent" CD. It's found quite often among 1st degree relatives of celiacs. "Clues can be **short stature; anemia; amenorrhea [loss of menstrual function] of no obvious cause; or patients with unexplained immunological abnormalities.**" (Corazza, G.R. et al., *J Clin Gastroenterology*, 1993 Jan 16(1): 16-21.) **Other signs might be osteoporosis, dental enamel defects, and even infertility!** (Joseph A. Murray, M.D., *Clinical Immunology Newsletter*, Sept/Oct 1993.)

As a matter of fact, medical scientists aren't sure exactly what triggers *active* celiac sprue. Clearly, it runs in families; but in identical twins where

one has CD, 30% of the other twins remain free of it. Theories abound, one group proposing that sensitivity to gliadin may be quite common but certain events are needed to push a "latent" case over the brink into fullblown CD. Intestinal infections could be one; *too much gluten in the diet could be another.*

The ailment was once thought to begin in infancy and typically to produce bellyaches, diarrhea, malabsorption, and wasting. Researchers changed their minds after finding CD in young and middleaged adults who had tested negative years earlier. They now agree *it may appear at any age, and may skip gut symptoms. Persistent canker sores in the mouth can be one signal. Kidney ailments may be another in 'silent' CD.*

A sobering thought: Jacqueline Kennedy died in May of malignant lymphoma. While lymphoma undoubtedly occurs in individuals who don't have CD, intestinal lymphomas happen to be the most common cancers in celiacs, occurring at a far higher rate than in the general population. A recent study finds that adherence to a nongluten diet substantially improves the celiac's chances of avoiding this and other cancers related to CD.

The hitch is that CD isn't diagnosed soon enough. A delay of 10 to 12 years is common. "Probably the first and major problem encountered is the difficulty experienced by physicians in recognizing that the patient has CD," writes J.A. Campbell, Ottawa (*World Review of Nutrition & Dietetics*, vol 51, pp 189-233, 1987.)

People who care about their health are cutting back on fatty meats and cheeses and eating more complex carbo -- which is all to the good *except* if the carbo are all wheat-based. Remember, relentless intake of gluten foods by susceptible individuals may transform latent CD into an active form. Incidentally, gluten protein itself is used commonly as a substitute for meat in vegetarian specialties, e.g. "burgers." For potential or actual celiacs, this could mean trouble. Celiac researchers in the Netherlands likened these foods to "Snow White's apple!"

CD Awareness in U.S. Medicine

Perusal of hundreds of abstracts, the bulk of which represented work done in countries other than the United States, e.g., U.K., Italy, Hungary, Sweden, Finland, etc., left me with strong doubts about the depths of our own medical establishment's commitment to exploring celiac sprue and its tie-ins to other illness. I've subscribed for years to *The American Journal of Clinical Nutrition [AJCN]*, but can count on the fingers of one hand their articles on gluten intolerance -- surely a subject of supreme relevance to *clinical nutrition!* As a matter of fact, beginning in 1987 until now there have been exactly *three*, out of a total of about 2000 articles! One dealt primarily with vitamin A absorption in malabsorption disorders, including CD. One described inadequacy of wheat gluten when given as the main protein to lactating *rats*¹ -- the nursing litters died! Both were U.S. studies. The one truly germane article, "Effect of gluten-free diet on bone mineral content in growing patients with celiac disease," came from a pediatric hospital and university institute in *Milan, Italy*.

Doctors there found bone mineral content in young celiac patients to be significantly lower than in nonceliacs, but after the celiac kids had been on a glutenfree diet a little over a year, bone mineral content built up faster than in other youngsters, as if to make up for lost time. The authors write: "Our data indicate that although osteoporosis complicates CD during childhood and adolescence, glutenfree diet alone is able to remarkably improve bone mineralization." [*AJCN*, Feb 1993, 224-228.]



1. I don't know if rats get celiac sprue, but some Irish Setter dogs do! They get the same gut damage and illness from gluten that human celiacs do, and recover in the same way on a glutenfree diet!

I myself became aware of gluten foods as potential dynamite only about 5 years ago. "Celiac awareness" hasn't yet hit most nutrition and medical professionals in the U.S. Does it have to do with the massive investment our society has in wheat-based products, both culturally and economically? Is the thought of doing without pizza and doughnuts too devastating for even health workers to face? Does tacit understanding and/or lack of funding steer researchers away from studies that (1) might compel massive changes in the food industry; and (2) could lower people's dependence on prescription drugs and pain killers? Am I wrong to curl my lip when I read in every issue of *AJCN* that its Sustaining Members include Coca Cola, General Mills, Kraft General Foods, Nabisco, Procter & Gamble, Abbott/Ross Labs, Lederle Labs, Miles Inc./Bayer AG, Sandoz, and Wyeth-Ayerst Labs?

Wake up, you shortsighted food titans! There's *money* to be made in developing tempting nongluten breads, snacks, desserts, etc., etc.! If medical folks get off the dime and begin routine testing for CD in patients with stubborn, nonresponsive ailments (using the new noninvasive tests -- see FL#75), a very large population of potential consumers for these products is going to emerge.²

You don't believe the taste thrills of apple pie, bagels, and hot cinnamon buns can be captured with nongluten carbohydrates? Then you don't have faith in American enterprise and knowhow!



Here are some of the great "safe" carbos, besides **millet, teff, sorghum, corn, and rice**. Many go back to the far reaches of prehistory -- it's hunter-gatherer time again!

Starchy roots or tubers: **Potato, sweet potato, tropical yam, cassava** also known as **manioc or yuca** (tapioca is made from it), **arrowroot, taro, dasheen, malanga, Jerusalem artichokes**. Can be used as whole foods or flours.

Buckwheat, amaranth, and quinoa are seeds of non-grasses, i.e., dicotyledons. Can be used as cereals or flours.

Chestnuts and acorns are nuts with high starch content, tasty as flours or ground into meal.

The following seeds, ground into meal, combine well with starches in bread, cookie, and cracker recipes: **seeds from sunflower, sesame, flax, squash, and pumpkin**.

Flours from **legumes** such as **lentils, mung, soy, and garbanzo beans** have been used for centuries. (Some celiacs, however, don't digest beans well.)

As far as spaghetti and other pastas are concerned, Asians were making delectable ones from rice, buckwheat, and bean flours thousands of years ago and still are!

I depend on EnerG Foods Inc. in Seattle for nongluten breads and satisfying rice spaghetti. Their English muffins, by the way, are good.. (All their breads come vacuum-packed and have to be toasted.) They carry flours, bread mixes, cookies, etc., all nongluten. (Free plug because they're life-savers! 1-800-331-5222.)

I think it helps all of us bagel lovers to remember that wheat flour wasn't the world's 'universal' carbo until pretty late in history. People over great stretches of the globe relied on and cherished foods like the ones above. Millions still do. In Johannesburg, a new style of fast-food place is opening, competing with the American-style chicken and burger joints on every corner. 'We have been shy to eat our food in town. Now, with the new South Africa, we want to show we are Africans,' said the owner of a new Africa Hut, according to an AP report June 8.

"He had little time to talk during the lunch rush Friday," the report continues, "dashing from kitchen to counter to replenish trays with towers of stiff corn porridge known as pap, peppery-salty mounds of malamagodu (tripe), morogo (a leafy green vegetable), and samp, a mixture of hominy and beans.... 'We are proud of our tradition, that's why we come here,'" two nursing students said over plates of pap and fragrant chicken stew. □



2. Encouraging news: The USC School of Medicine in Los Angeles very recently began a center for diagnosis, consultation, and research on celiac disease. Also, Dr. Martin F. Kagnoff of UC San Diego is setting up a session devoted exclusively to celiac disease at the 10th World Congresses of Gastroenterology to be held in Los Angeles, October 2-7.

Organized celiac groups can be great sources of support and enlightenment. Two of my favorite bulletins, chock full of research updates, recipes, and advice on where to find good glutenfree stuff, are the *Celiac Disease Foundation Newsletter*, 13251 Ventura Blvd. #3, Studio City CA 91604, tel: 818-990-2354; and *The Celiac Action Line*, Mary Alice Warren, Editor, 112 St. Croix Ave., Cocoa Beach FL 32931, tel: 407-784-5696.

AL JOLSON & NELSON EDDY STARRED WITH THEM, TOO

Longtime subscriber Shyrle Hacker has written a book no one else could have done: *On Stage, Gypsies: A Memoir of a Dancer in the '30s* (Falcon, 1994). That's right, Shyrle is in her 80s and her fellow Fanchon & Marco dancers mostly have tapped their way up the golden stairs!

On the cover, framed in gaudy art-deco lights, are two '30s-style beauties showing lots of silken leg. One of them is 18-year-old Shyrle, now "Shanna," just out of high school in Oakland. The depression hadn't hit hard yet, and Fanchon & Marco created the novel idea of having live musical shows before each showing of major movies in important theaters. They had dance troupes -- "Gypsies" -- doing shows simultaneously all over the country.

Shanna and Eve, her best friend from high school, were catapulted into a world of glamour, stars, and gorgeous costumes, but also killer rehearsal and performance schedules, lousy food, and freezing, coal gas-choked trains. An innocent Shanna discovered to the outside world she was a "cheap chorus girl." At a fancy party in Chicago, the "movie producers and talent scouts" turned out to be greasy guys with groping hands -- Al Capone and his henchmen!

Not-so-virginal Eve had an abortion in Mexico so she could stay a Gypsy. Sex then was not so different from now, Shyrle says, only more hidden. Eve's short life was tragic, but Shyrle married the boy she loved. They had 40 years together. She has wonderful kids and grandkids and is working furiously on her next book. Her curly hair is silver now and she's still a long-legged beauty.

I just want FL readers to know the kinds of fellow-subscribers they've got! (The book is distributed by Creative Arts Book Co., Berkeley CA 510/848-4777). □



WHAT IN HECK DOES TOOTH ENAMEL HAVE TO DO WITH ACID/ALKALINE BALANCE?

A young woman friend asked me if I had any bright ideas about a scary problem: her teeth's outside layer, the dental enamel, was eroding! Apparently the main body of each tooth, i.e., dentine, was normal, so her teeth had no decay -- just erosion!

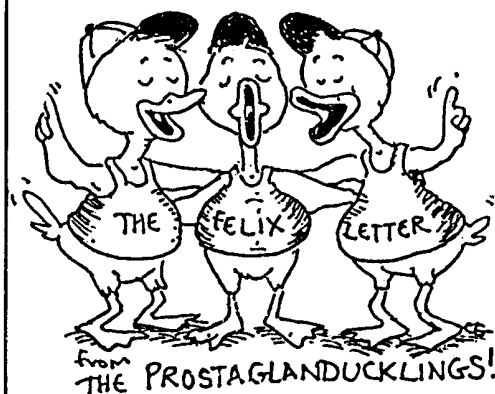
Her history of allergies and hay fever plus symptoms of irritable bowel gave me a clue. "I have a hunch your complaints may be related to over-acidity," I told her. "No, I don't mean too much hydrochloric acid in your stomach, as in TV commercials! I think you may not be neutralizing metabolic acids efficiently."

Normal metabolism creates more acidic than alkaline products. For instance, exercise produces *lactic acid* buildup in muscles. Carbon dioxide produces *carbonic acid*. Protein foods produce *sulfuric and phosphoric acids*. The body engages in a delicate balancing game between acid and alkaline, striving to maintain body fluids, tissues, blood, etc. at requisite pH's.

My young friend was enduring inescapable job- and family-related anxieties. *Stress* produces a barrage of acidic metabolites. An irritable gut may be sending out painful signals because it needs to be bathed in soothing alkaline fluids but, instead, they're acidic! Allergies and hay fever usually are preceded by an acidic buildup too.

This young woman sometimes suffered a severe allergic reaction to food if she exercised or took a brisk walk after eating. It was as if the extra lactic acid from exercising tipped the scales way over on the acid side!

"Sodium bicarbonate is simple, effective, and cheap," I told her. Many doctors have forgotten that bicarbonate secreted by the pancreas is a major player in the acid-alkaline balancing act. It's needed to neutralize acid (from the stomach) in the duodenum and create an alkaline pH for the rest of the gut. That's what's required for optimal digestion.



But bicarbonate does more than help digestion. It gets into the bloodstream and continues its buffering and neutralizing of acidic metabolic products throughout the circulation. That's how it stops many allergic reactions before they take over. One-third to one-half teaspoon of Arm & Hammer bicarbonate of soda in plain or fizzy water with a squirt of lemon has quelled many an allergy attack, as well as the beginnings of colds and flus. This used to be a standard remedy in older medical texts, but modern medics consider it too simple!

Consider it *orthomolecular medicine*, i.e., adding molecules the body normally makes or needs, thereby supporting its functions.

I told her if she could find potassium bicarbonate in the drug store, a mixture of the two works nicely and provides extra potassium. For convenience away from home, Alka Seltzer Gold is an aspirin-free mixture of the two bicarbonates and citric acid.

The idea, I told her, is to take the bicarbonate between meals and at night in order not to neutralize stomach acid, as it's important for digestion.

I also suggested she get a water filter that removes chlorine; and that she use dentifrice made from bicarbonate of soda.

A baking soda regimen doesn't have to be a lifetime enterprise, I told her. As her symptoms improved, she could reserve it as a comforting backup for emergencies.

Special note: Dental enamel defects have been observed in some individuals with hidden gluten intolerance. Glutenfree diet would be the fundamental healing measure, in that case. Baking soda between meals, pancreatic digestive tablets, and supportive vitamin, mineral, and herbal supplements would help to speed recovery.

Rosetta Schuman, a wise lady of rare foresight who's spent a good part of her 90 years writing and counseling about nutrition, sent me a reprint a few years ago by Martha R. Jones, Ph.D. I just reread the 1966 paper and realized how insightful it was. Her professional life had focused on investigating effects on tooth structure of diets high either in alkaline or acid residues. Between 1929 and 1936 she helped children of poor plantation workers in Hawaii overcome terrible dentine and enamel development by instituting a few simple diet changes, namely, *substituting foods with a high alkaline index for those with low alkaline index.*

She had learned in earlier work at UCSF Medical Center (on puppies) that *too high an acid residue from diet caused destruction of enamel*, even when tooth roots and dentine were strong. She stressed that no matter how well balanced in nutrients a diet may be, *dental enamel will be affected if the diet is too high in acid-forming foods.*

A wonderful guide to Western acid/alkaline and Eastern yin/yang dietary concepts is Herman Aihara's *Acid and Alkaline* (published by George Ohsawa Macrobiotic Fndtn, 1511 Robinson St., Oroville, CA 95965. I hope all health food stores carry it).

He explains the difference between foods which *test acidic*, e.g., oranges, and those that *leave an acidic residue when metabolized*. When foods are comparatively high in the elements *sulfur* and *phosphorus* (i.e., most high protein foods, including meat, poultry, seafood, cheese, nuts and grains), sulfuric and phosphoric

acids are produced and must be neutralized before they can be excreted by the kidneys. Hence, these are classified as *acid-residue* foods.

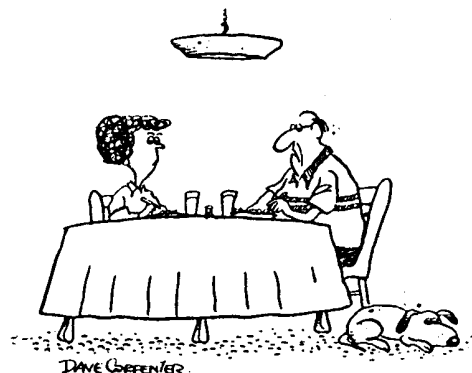
On the other hand, oranges and most fruits and vegetables, even though many may test acidic, are dominant in *alkaline-producing elements*. Their organic acids become CO₂ and water; *the alkaline elements (potassium, sodium, calcium, magnesium) remain and neutralize body acids*. For this reason, fruits and most vegetables are alkaline forming foods.

Here are some good ones: **spinach, Swiss chard, beet greens, beets, yams, carrots, potatoes, chestnuts, bananas, blackberries, strawberries, oranges, sorghum cane molasses, and more exotic stuff like ginger, shitake mushrooms, and seaweeds such as hijiki, wakame, nori.**

After reading Dr. Jones' description of how helpful it was to use syrup from pure evaporated sugar cane juice in alkalizing the diets of her young Hawaiian charges, I've switched to Sucanat®, a sugar that's naturally high in potassium because it's made the same way.

A rule-of-thumb in our family: Chomp on a few fresh spinach leaves, salad greens, and/or sunflower or clover sprouts whenever snacking on meat, seafood, or cheese. At main meals, of course, we add plenty of veggies and in between enjoy fruit. We're big on balance! □

THE WALL STREET JOURNAL



"High fiber, no salt, low cholesterol. No wonder the dog doesn't beg anymore."



TWO NEW BABIES!

Céline Haugen gave birth this year to Natasha Margaret, now a rosy-cheeked 5-month-old with a drop-dead smile who's thriving on mama's milk. It's remarkable only because, in 1975, when Céline was a 17-year-old living in her African homeland Rhodesia (now Zimbabwe) with her German-born parents, she developed severe, crippling rheumatoid arthritis. Standard medical treatments didn't alter the illness's relentless course. She always felt it was related to times of exceptional stress in her life.* Eventually, she began a long, courageous exploration of alternative ways to thwart this autoimmune disorder.

I wrote about it in FL#66, long before Natasha was on the way. Céline and her husband live in a small city in California where she's the economic development manager. She became a 'fish' vegetarian, giving up milk, wheat, alcohol, and coffee. Flaxseeds are a daily item, as are herbs, vitamins, kelp and spirulina. Except for minor flare-ups, she essentially has remained free of the ailment. Natasha Margaret is the reward!

The other 'baby story' came in the form of a letter from a subscriber-friend: "By the way, my other daughter who just had the baby had been taking fish oil capsules as per your suggestion which I passed on to her. Her labor was an easy (relatively!) four hours, one hour of it in Hospital, compared to four years ago somewhere in the vicinity of 36 hours!!! Do you suppose little Owen slid out on fish oil???" □

*If I were Céline I'd be exploring one more preventive measure: *natural progesterone*. Perhaps in her case stress manifests itself as a big drop in progesterone, hence inadequate output of 'anti-stress' adrenocortical hormones. (See "More on Hormones.")

BLOOD PRESSURE: TO MEDICATE OR NOT TO MEDICATE...

Since I'm no spring chicken myself, I've got plenty of friends who take pills to stave off decrepitude (I'm not talking about vitamins), the commonest being medicines for high blood pressure. I was taken aback, however, when a young acquaintance (late 30-ish) told me his doc had given him two choices: medication, or hypertension for the rest of his life. Were there no other options, he asked? What about nutrition?

I explained that with no history of heart disease in himself or his family he certainly could take time to explore other measures without worrying about an imminent strike from the Grim Reaper! Here are the ones we talked about, gleaned both from alternative and conservative medical resources. (See also FL#46.)

Magnesium, Potassium, Calcium

Ample amounts are needed for pressure regulation. (Even in salt-sensitive hypertensives, a high potassium intake helps to offset pressure rises from salt.) Many hypertensives have low levels of magnesium. Here are useful foods that contain some of all three:

- Leafy greens & other veggies: e.g., broccoli,* Swiss chard, spinach,* watercress,* yams,* potatoes, carrots, squash,* mushrooms.

- Fresh nuts and seeds: e.g., pumpkin, squash,* sesame,* sunflower, chia,* walnuts, pecans, almonds, pine nuts, Brazil nuts, cashews,* macadamia nuts.*

- Grain products: e.g., corn tortillas, oats,* millet,* brown rice,* buckwheat,* quinoa.

- Legumes: e.g., soybeans, tofu, all other beans,* peanuts.

- Fruit: e.g., bananas, cantaloupe, apricots, oranges, figs, raisins, cranberries,* all kinds of berries.*

- Supplements of calcium if intake is below 1000 mg/day.

- Supplements of magnesium, 400 to 800 mg/day, on general principles. Magnesium does *safely* what certain heart drugs try to do. Deficiency is very common in Western diets.

Omega-3s for Healthy Kidneys

Our kidneys exercise control over blood pressure through *renin* secretion. Runaway prostaglandins can lead to too much renin. Blood vessels constrict while pressure soars. Omega-3 (w3) fatty acids prevent prostaglandin imbalance and its consequences.

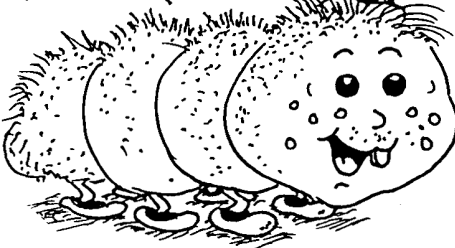
- Examples of w3 alpha-linolenic sources: flaxmeal,* flax oil,* canola oil, oatmeal,* chia seeds,* walnuts, chestnuts, pumpkin seeds, soybean products,* purslane (a salad green).

- Typical sources of w3 EPA and/or DHA: e.g., fish, shellfish, egg yolk, organ meats, fish oils, fresh sea vegetables.

Sugar, Insulin, & Hypertension

- Some people react to sugar by putting out too much insulin. One theory is that high insulin levels can raise blood pressure in vulnerable individuals by causing them to retain sodium but lose potassium and calcium. Another possibility: excess insulin stimulates high adrenalin output which drives up blood pressure. *As long as these individuals eat sugar and refined carbohydrates regularly, blood pressure stays elevated.* Doctors can test for high insulin response to sugar. However, a simple experiment -- using no sugars or refined carbs for a few weeks and observing any change in pressure -- should provide the answer, one way or another.

DO YOU REALIZE THAT
78 BILLION PROTAGLANDOPEDES
CAN HANG OUT IN ONE
FINGERPRINT?—TALK
ABOUT BOREDOM! OY!



* Source of nitrilosides and/or thiocyanate.

Obesity & Blood Pressure

- My young acquaintance didn't have a weight problem, but *hypertension often goes hand in hand with overweight and improves as the excess weight is shucked.*

Supplements

- Multi vitamin/mineral covering requirements fully.

- Vitamin E, 200 - 600 IU daily.

- Vitamin C, 1000 mg or more daily.

- Coenzyme Q10, 30 mg, twice daily between meals.

(All the above help to keep blood vessels resilient and tough enough to withstand surges of high pressure without injury. In general, important to health of circulatory system and heart.)

- Gamma-linolenic acid (GLA), 200-500 mg/day. (Precursors to prostaglandins that normalize kidney function.)

Herbs

- Garlic

- Ginseng

- Black Cohosh

- Valerian root

(Calming, strengthening & hypotensive effects. *Scientific Validation of Herbal Medicine*, 1986, Daniel B. Mowrey, Ph.D. Keats Publishing, New Canaan CT, 1-800 858-7014.)

Not all hypertensives are salt-sensitive, but it makes sense in general to use salt sparingly and cut way back on pre-salted foods. In a state of nature, the foods highest in salt, i.e., marine plants, also contain much greater amounts of potassium and magnesium to balance sodium. That should be our clue.

By the way, sodium chloride is the only sodium that raises blood pressure. Sodium ascorbate, sodium bicarbonate, sodium citrate, and monosodium glutamate don't have any effect on blood pressure -- good news for those of us who swear by bicarbonate's soothing effects on allergies and digestion.

In the 1940s Dr. Walter Kempner popularized a rice and fruit diet to get pressure down fast. Julian Whitaker, M.D., in his newsletter *Health & Healing* (March 1993), writes: "I once treated an airline pilot who came to my clinic with blood pressure of 225/115 and announced: 'If I don't have normal blood pressure in two weeks, I'll lose my license.' I put him on rice and fruit, and vegetables, which also are low in fat and sodium, and high in potassium and magnesium. Two weeks later he passed his flight physical with blood pressure of 130/84.....I suggest using brown rice, as it is high in fiber..."

Oh No, Not Gluten Again!

Here's a thought, folks. Maybe the pilot's hypertension ended because he wasn't eating *wheat*. Lloyd Rosenvold, M.D., writes: "...when I dug into older medical journals, back into the 1920s, I found several well-documented research papers reporting an aggregate of 40 cases of vascular hypertension which could be shown to be due to 'allergy' to foods, mostly to wheat. Elimination of the wheat from the diets had brought relief of the elevated blood pressure."

Later, after much research and clinical work with celiac disease (CD), Dr. Rosenvold wondered if these cases had been manifestations of CD, rather than simple allergies. (*Can A Gluten-Free Diet Help? How?* Keats Publishing, New Canaan, CT, 1-800 858-7014.) His theory on high blood pressure is provocative, as are his insights on possible connections between CD and intestinal yeast infections, psoriasis, arthritis, depression, multiple sclerosis, schizophrenia, etc. This powerful little book is a plea for more open-minded research. Because diagnosis of CD tends to be neglected or delayed, Dr. Rosenvold believes CD's prevalence may be grossly underestimated. That's my hunch, too.

Gathering & Hunting for Thiocyanate!

Here's my last, for now, suggestion re hypertension: *Eat lots of foods that raise plasma thiocyanate levels!* In the 1930s and early 1940s, potassium thiocyanate or sodium thiocyanate, both unpatentable medicines, were commonly prescribed for high blood pressure. Studies from that period show naturally high plasma levels of thiocyanate were associated with lower blood pressure, and vice versa. After World War II, new, patented hypertension drugs began competing for the market. Unprofitable thiocyanate was forgotten.

That, however, doesn't mean we can't consume a variety of tasty foods that provide it for us! They contain thiocyanate and/or nitrilosides, also called cyanogenic glucosides. Our body converts nitrilosides to thiocyanate by hooking on a molecule of "thion" [Greek for "sulfur"]. Thiocyanate is normally present in our plasma and saliva.

Asterisks after foods in earlier paragraphs signify they contain thiocyanate and/or nitrilosides. Here are more that raise our thiocyanate levels:

Kernels or seeds of apple, apricot, nectarine, peach, pear, plum, prune, and papaya.

Sorghum grain and sorghum cane molasses.

Sprouted seeds of alfalfa, clover, bamboo, garbanzo, mung beans and lentils. (Sprouting increases nitrilioside content.)

Cassava (yuca or manioc). Tapioca is made from it.

Tropical yams.

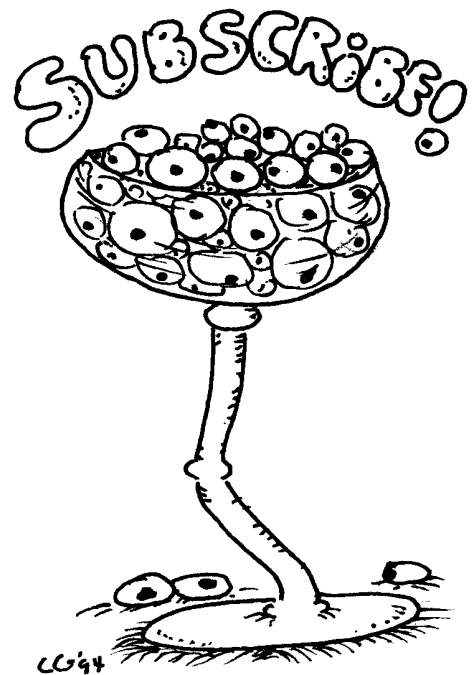
Observe, please, these all are *glutenfree* besides!

Tropical yams, in addition, are sources of precursors to natural progesterone. (See "More on Hormones.")

Do you detect a pattern yet? □

From the *Wall St. Journal*, April 7, 1994: "The tuna eyeball, long shunned as food in a country of exotic fish dishes, has gained cachet in Japan following news reports that it not only lowers blood pressure, clears the skin and stimulates the brain, but also tastes delicious. Industry nutritionists tout health benefits of docosahexaenoic acid, relatively abundant in the tuna's eye...."

At the family table years ago, my teen-aged sons used to specialize in grossing me out with revolting verbal images. It was a game they loved: chortling while I turned pale and swallowed hard! I fixed their wagons, though, once. I began treating the eyes of the cooked trout on my plate as delicacies, nibbling the yucky parts and daintily spitting out the hard white center. And I didn't even know about Omega-3 DHA yet! □



Illustrations by Clay Geerdes and other artists as noted.

The Felix Letter, P.O.B. 7094, Berkeley, CA 94707, is published independently by Clara Felix and supported solely by subscription. Descriptive list of issues & sample, \$1. Subscription \$11 (6 issues). Canada & Mexico \$12, U.S. funds only.

©1994. All rights reserved.