

## GETTING GROWERS TO CLEAN UP THEIR ACTS

This is about consumer power, ours. Nothing illuminates it better than the Alar hoopla that began early this year. First, the federal Environmental Protection Agency (EPA) announced a possible future ban on the use of the pesticide Alar on apples because of cancer risk. Soon after, on the CBS television program 'Sixty Minutes,' the Natural Resources Defense Council (NRDC), a nonprofit membership supported environmental organization, talked about its newly released two-year study, *Intolerable Risk: Pesticides in Our Children's Food*. The NRDC's full-time staff of more than 80 scientists, lawyers, and environmental specialists employs research, legal action, and education to protect our air, food, and drinking water and to conserve public land and marine resources. The study shows that legal limits for pesticides in food are based on what adults consume. Relative to body-weight, however, toddlers consume six times more fruit and 18 times more apple juice than adults. The result is a concentration of pesticide residues in the littlest, most vulnerable members of our society.

Public outcry has been enormous. Meryl Streep, the award-winning actress with the luminous visage, appeared on national television, speaking as a member of NRDC and a mother about her concern over ominous pesticide levels in the fruits and vegetables her children and everyone else's are eating. Sales of apples and apple products took a huge nosedive.

To soothe angry consumers, the apple growers' trade association and the EPA announced that only about 5% of the crop was treated with Alar. In May, however, the EPA publicly revised the figure to 15%. The NRDC said other surveys found as much as 35% of the crop to be Alar-sprayed. Consumers Union discovered Alar residue in three-fourths of 50 samples of apple juice taken from store shelves in New York State.

Alar has been used on crops for more than 20 years. The EPA first knew in the mid 1970's that it could cause cancer. Finally, in 1985, they proposed a ban, but their Science Advisory Panel nixed the idea. According to the New York Times of May 16, two U.S. senators charged that seven of the eight Panel members were serving as consultants to the chemical industry at the time they ruled to continue Alar's use. Alar, the trade name for daminozide, is made by Uniroyal Chemical Co. After one of the anti-ban scientists left EPA's Science Advisory Panel, he went to work as a consultant to Uniroyal. When interviewed, he said he saw "absolutely no conflict of interest" in his act.

Even if EPA begins proceedings now, it probably will be 1991 before Alar use is banned officially. But, wait! There's hope at the marketplace. Public outrage and the subsequent \$50 million loss to the apple industry have spurred the growers' trade association to announce it is directing members not to purchase Alar for this season's spraying, which is done ordinarily in June or early July to make apples ripen uniformly and stay crisp in storage.

Meanwhile, an unprecedented move is under way by supermarkets to secure organically grown, pesticide-free produce. Hallelujah! We health nuts/food faddists may be mainstream at last! The lesson is clear. Growers and chemical companies respond not from conscience—forget it!—but from a direct hit to the pocketbook. And clearly, government agencies that turn a blind eye on agribiz's lethal shenanigans are not immune to vox populi, if the vox gets loud and angry enough.

Meryl Streep is chair of a NRDC project, Mothers and Others for Pesticide Limits. I received their booklet *FOR OUR KIDS' SAKE*, which lays out the "Intolerable Risk" study and tells what we can do to lower the risk, including identifying the chemicals most commonly found in produce and those we can get rid of by washing. Simple, practical stuff. Detachable addressed

postcards are enclosed so we can write to Congress, the Food & Drug Administration, and EPA. We are advised to take steps to get our markets to stock pesticide-free produce by telling managers we're looking for certified organically-grown vegetables and fruits because we're worried about pesticide residues. The booklet provides lists enabling supermarket management to establish direct contact with growers and wholesalers of organic food. Do yourself and your community a favor: send \$7.95 to Mothers and Others, P.O. Box 96641, Washington DC 20090, for a copy of *FOR OUR KIDS' SAKE* and spread the good word.



## Grapes Aren't Sweet for Everybody

I haven't eaten grapes for a long time, ever since I saw convincing reports to support declarations by Cesar Chavez, president of the United Farm Workers (UFW), that farm workers and their families suffer heavily from ailments caused by exposure to pesticides. Several chemicals used on grapes are known to be carcinogens or teratogens, i.e.,

capable of causing cancer or birth defects in tested animals. Researcher Dr. David Schwartz reported in the American Journal of Public Health, June 1988, that women living in farm counties where pesticide use is high were almost twice as likely as other women in California to give birth to babies with "limb-reduction defects."

Dr. Marion Moses, an authority on environmental disease and a consultant for the UFW, said the findings back up what the union has been saying: that farm workers, particularly in the grape industry, have been giving birth to babies with unusually high rates of birth defects. Some infants of mothers who worked in the grape fields were born without fingers, others without limbs. Dr. Moses said one pesticide used in grapes, Captan, is similar in structure to thalidomide, the sedative drug freely prescribed in Europe that caused many babies to be born armless and legless in the early 1960's.

The UFW has been urging the banning of all pesticides known to be carcinogens or teratogens. The EPA keeps waffling, and the powerful agribusiness interests continue to deny that grapes carry unacceptable pesticide levels. But we know that many apple growers continued to use Alar for at least ten years after they knew it might cause cancer, and only now, when faced with a big loss of income, are they willing to stop.

That's why Cesar Chavez asks us not to buy grapes until use of these chemicals is ended. He says that when farm workers are protected, the rest of us can eat grapes in peace, and be protected as well.

As we go to press, today's paper cheered me with the news that California's Attorney General, John Van de Kamp, has joined with the AFL-CIO, a Ralph Nader consumer group called Public Citizen, and the Natural Resources Defense Council in a suit against the EPA, charging the agency with failing to protect the public from cancer-causing pesticides. They seek an end to use of seven pesticides that have been shown to cause cancer in animals. The suit further contends that the EPA is "circumventing" the federal law passed by Congress last year to get standards set for all active ingredients in pesticides by 1997. The EPA has set new standards, so far, for only 185 out of about 600 active ingredients in use.

## SEXY BEEF

I had stopped buying commercially raised beef some years ago, after I learned that cattle are injected routinely with antibiotics to keep down infections from the muck-filled feed lots they're jammed into while being fattened for market. The antibiotics enter our own system after we eat beef and are said to be responsible for creating virulent, resistant strains of germs. Early this year, when the European Economic Community placed a ban on any imported American beef raised with growth-promoting steroid hormones, we were given another good reason to think twice about eating beef.

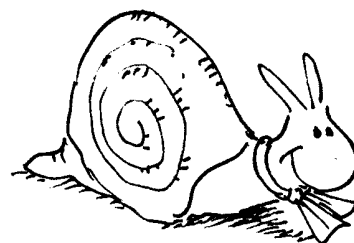
Sex hormones in beef? Most people innocently thought they were forbidden, after the DES fiasco. For thirty years, DES (diethylstilbestrol) was given the safety-guaranteed green light by the U.S. Dept. of Agriculture (USDA) for use as a growth promoter in beef cattle. The USDA finally banned its use in beef in 1979, long after DES had been proven to be a powerful carcinogen. Currently, USDA press releases are straining to reassure a startled public, again, of the 100% absolutely guaranteed safety of the male and female hormones in use since DES was banned. Five of them are estradiol, progesterone, testosterone, and two synthetic sex hormones.

The cattle don't need them. You and I don't want them. Why are they being used at all? Bottomline stuff--the manufacturers of cattle growth hormones, a two billion dollar industry with lush promotion budgets, convince beef growers the hormones save \$20 a head on feed costs by allowing cattle to reach their market weight faster. But what good will that do growers and their bottom lines, if people in Europe and here stop buying sexified beef? By now, USDA assurances of safety are beginning to look a trifle moldy. They actually had the chutzpah to declare: "Those of us in scientifically-based regulatory agencies can look back on the DES action with pride." After allowing a carcinogen for 30 years?

Personally, I've pretty much stopped eating beef. Aside from dreading what we'll learn, 30 years down the pike, about effects of long-term consumption of hormone-treated beef, I feel a growing sense of urgency to cut back on a product at the core of environmental disasters. Range cattle grazing by the

millions in our national parklands pollute streams, trample vegetation, and destroy a natural balance. When acreage in the U.S. and the rest of the world that should be devoted to food crops is used for cattlefeed or pasture, people who could be fed go hungry so that affluent nations can get their daily steaks. A major bulwark against the greenhouse effect, the Amazon rain forest, is being bulldozed to make pastureland for our future hamburgers.

Again, only a few of us may be environmental activists, but we all are consumers. Tell your butcher or market manager you won't buy beef that's treated with hormones and antibiotics, and you want guarantees. If, like myself, you gladly pass on beef altogether, so much the better. Some lamb, but mainly fish fills the bill for me, and I enjoy many more vegetarian days each week than I did a few years back. Our buying power can send a message that will sock the board rooms in their bottom lines, and may help our fragile planet.



## HIGH BLOOD PRESSURE: A CLUE TO THE MYSTERY

An attractive theory on this ailment came across my desk. Lloyd Rosenvold, a retired physician, still sees a few select patients in the small town of Hope, Idaho. His readable collection of case studies, THE GLUTEN CONNECTION, describes some of the ways in which an unsuspected sensitivity to gluten may manifest itself. Gluten is a complex protein substance found in almost all grains, but most abundantly in wheat and rye, to a lesser extent in oats and barley. Gluten contains the proteins glutenin and gliadin, but gliadin alone appears to be the culprit in vulnerable persons. For them, it acts like an antigen, provoking the immune system to form antibodies. To come to the body's defense against a perceived "enemy," antigen-antibody immune complexes form in the lining of the small intestine.

This is how Dr. Rosenvold describes it: "...immune system lymphocytes from the mucous lining (and from the blood stream) sally forth to try to destroy the offending gluten. That is by nature their protective work. But, through what we might call a misguided immune response, they end up destroying the small intestine lining instead. This is an auto-immune response---a body's reaction against its own tissues."

An inherited tendency to react in this way is known as gluten enteropathy, celiac sprue, or celiac disease. Damage to a large section of the main digesting and absorbing tissue of the body makes it impossible for a celiac to get a full complement of nutrients from the daily intake. Malabsorption leads to malnutrition. Ailments multiply yet seem unrelated to the primary cause. Worse yet, celiacs have a hard time getting their disease diagnosed. Complaints of diarrhea, abdominal pain and distention often are bundled under the heading of "irritable bowel" and treated with palliatives. Tests for celiac disease can be invasive and expensive. Besides, most physicians consider it to be rare.

Dr. Rosenvold doesn't---not after many years of uncovering it in unexpected relationship to illnesses such as chronic depression, rheumatoid arthritis, systemic yeast infection, rheumatic fever, bursitis, polymyositis (multiple muscle stiffness and pain), multiple sclerosis, and myasthenia gravis, the muscle-weakness disease that felled one of the world's richest men, Aristotle Onassis. He thinks the incidence of celiac disease is widely underestimated.

He has a hunch it may be a prime factor in high blood pressure. Some years ago, he observed that many patients who tested allergic to wheat also had elevated blood pressure (BP). A wheat allergy doesn't mean celiac disease necessarily, but a tendency is possible.

He writes: *A careful research of the then current medical literature brought only silence on the question of food idiosyncrasy (allergy) and elevated BP. But when I dug into older medical journals, back into the 1930's I found several well documented research papers reporting an aggregate of forty cases of vascular hypertension which could be shown to be due to 'allergy' to foods, mostly to wheat. Elimination of wheat from the diets had brought relief of the elevated BP.*

*Why had not medical science caught up with the discovery and adopted diet control for elevated BP? It just so happened that at about the same time some efficient drugs became available that would lower the blood pressure, and with drugs being so much more simple to manage (but not necessarily better) than diet therapy, it appears that physicians in general forgot about the natural diet remedy and went "all out" for the drug program.*

He says the magnitude of the high BP problem in America "is so great that there simply are not enough doctors and clinics to efficiently manage the possibly 40 millions--yes, millions--of Americans who suffer from significantly elevated BP."



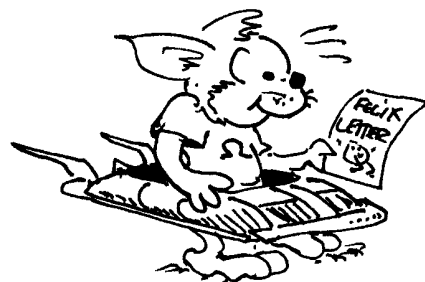
African-Americans, even as children, suffer disproportionately from the ailment. Two-thirds of black males under the age of 50 have high BP and are at great risk for heart attacks and strokes. Human beings lived for thousands of years on a 'hunter-gatherer' diet, i.e., wild vegetables, fruits, nuts, seeds, tubers, and flesh food from animals, fish, and insects. Grains as food came much later, not until ten thousand years ago, when communities first sprang up that practiced planting, harvesting, and animal husbandry. Vast stretches of Africa still remain untouched by modern agriculture and grain cultivation. Native Africans living in remote villages who still follow their ancestral 'hunting and gathering' food patterns don't have high BP, but their cousins who migrate to industrialized areas and eat modern food develop it quickly.

Ten thousand years probably gave most agricultural people's systems a chance to adapt to consuming grains, but I'm beginning to suspect this adaptation ran into a snag some 150 years ago, when new industrial technology transformed whole cereal grains into artful facsimiles of real food. White-flour-based breads, croissants, crackers, cakes, cookies, pasta, and thickeners make up much of our modern Western diets. Most of us appear to handle it, but I think we're going to be discovering, more and more, that many of us are kidding ourselves.

Gliadin in gluten seems to act like a hidden toxin in some individuals rather than just an allergen, moreover a toxin that stirs up a savage auto-immune response. Maybe African-Americans are especially vulnerable. I think the gluten/gliadin connection to high BP should be investigated on an all-out basis and I hope African-American medical researchers and community people take the lead.

A possible clue comes from recent studies showing high levels of anti-gliadin antibodies in patients who have glomerulonephritis, a serious inflammation of the kidneys. Healthy kidneys are vital in keeping BP normal. Italian researchers, writing in *The New England J. of Medicine* (Oct. 30, 1986, p. 1168), suggest "dietetic factors may have a pathogenetic role in primary nephropathy [kidney disease] and may perhaps explain the uneven geographical distribution of this nephropathy, which is most common in the Mediterranean area, where gluten-rich foods represent the basic dietetic elements."

If you or your family have any of the health problems Dr. Rosenvold describes, and they don't seem to respond to treatment, you may find **THE GLUTEN CONNECTION** to be a lifesaver. Copies may be ordered from Rosenvold Publications, Inc. (a nonprofit corporation), P.O. Box 330, Hope, Idaho 83836. Suggested donation price is \$6.50 plus 65¢ postage. Another invaluable book on the subject, **YOUR FAMILY TREE CONNECTION** by Australian M.D. Chris Reading (reviewed in FL #44), can be ordered from Keats Publishing, Box 876, New Canaan, CT 06840, for \$9.95 plus \$2.50 postage.



## SARDINES AND HISTORY

The only president I ever trusted, at least a good part of the time, Franklin D. Roosevelt, smoked a lot of cigarettes and died on April 12, 1945, of cerebral hemorrhage at age 63--too young even to start collecting checks from the outfit

that was his baby, Social Security. Harry S. Truman, to whom we owe the Korean and the Cold War, ate a sardine sandwich every day for lunch, was healthy as a horse, and died at 88. No moral in it, only a possible lesson. I'm coming across more and more encouraging data, not on presidents but on sardines. The best news is about the ones from Norway packed in sild (herring or sardine) oil. The information may come as a surprise to doctors and dietitians who suspect there may be something more than a passing fad to reports on the benefits to heart and arteries of the omega-3 essential fatty acids in fish oils, yet who hesitate to recommend fish oil capsules because of dire warnings in medical literature about the need for more research on their effects.

Well, guess where the oil in fish oil capsules used for medical studies comes from? From the very same worldwide industry that has been processing small oily fish (menhaden, herring, capelin, etc.) into fish oil and fish meal for a very long time. Nowadays, it has refrigerated boats that can carry 400 to 600 tons of fish to processing plants, where the catch is steam cooked, pressed, and dried to produce commercial fish meal. The oil that's pressed out, if it's destined for edible use rather than fuel, is processed and purified by standard techniques, much like those used in the vegetable oil industry. A tiny portion goes to pharmaceutical companies, where further refinement and encapsulation can take place. Presto—fish oil capsules!

What happens to more than a million tons of edible fish oil produced each year? About 90% gets converted into margarine and shortening in Europe and the U.K. In the United States we hydrogenate vegetable oils for margarine, etc. Western Europe hydrogenates fish oils. The valuable omega-3 fatty acids are destroyed in either case. The balance of the edible fish oil is used in the world's fish-canning industry. And now we come to Norway's contribution to healthy arteries: A typical 3.75 oz. (106 grams) can of Norway sardines, available at any supermarket in the U.S., has 22 grams (about 1-1/2 tablespoons) of sild oil containing approximately 3 grams of omega-3 fatty acids. The sardines have a similar

content, bringing the omega-3 total in fish plus oil to anywhere from 6 to 9 grams per can. (Fatty acid content varies with variety of sardine.) **Guidelines: Japanese fishermen with superb freedom from heart attack or stroke take in an average of 4 grams omega-3 a day, year 'round (see FL #45).**

To get 6 grams (6000 milligrams) of omega-3 fatty acids from fish oil capsules on the market today you'd have to consume 18 of the ones averaging 340 mg omega-3 each. If you prefer the more concentrated ones (500 mg omega-3 per capsule), you would need to take 12. By medical standards, that's a megadose. By mine, that's expensive and a lot to swallow! A sandwich or salad of Norwegian sardines (oil, tiny bones, and all), enticingly seasoned with herbs, onions, tomatoes, sprouts, and lemon juice, is not a treatment. The health benefits come gratis. (The sardines in one can provide about a third of the day's protein, calcium, and phosphorus and are rich in nucleic acids.)

Let us thus be aware of the contradictory nature of current medical admonitions against consuming capsules of an oil that, in noncapsule form, has been a cherished staple in canned fish for about a century! It would make more sense if medical authorities questioned the wisdom and safety of encouraging millions of people in Europe and U.K. to consume margarine and shortening made from fish oils in which the vitamin-like omega-3 fatty acids have been destroyed.

While waiting for the ultimate word on the subject from the medical community (hah!), here's what this grandmother does to keep herself well-oiled. I eat fresh fish often and a can of Norwegian sardines plus a tablespoon of sild oil a few times a week. A little olive oil if I sauté anything. A teaspoon of canola oil for salads, or organic flaxseed oil when I can afford it. (When Donald O. Rudin, M.D., and I wrote *THE OMEGA-3 PHENOMENON*, non-organic flaxseed (linseed) oil, on which Dr. Rudin's therapeutic study was based, was available and affordable, but not any more.) A tablespoon daily of ground flaxmeal for its omega-3's and anti-cancer fiber.

Because of Dr. David Horrobin's provocative theories about the key roles of another fatty acid, GLA, in (1) normalizing cholesterol levels and (2) keeping us from making too much platelet-coagulating thromboxane, high levels of which are seen in coronary patients, several times a week I take capsules providing a total of 200-300 mg of GLA (from evening primrose oil, borage oil, or black currant oil), or shake up a tablespoon of powdered Spirulina in juice. It's a blue-green algae that's high in GLA, protein, and beta-carotene. I take one or two 400 I.U. capsules of natural vitamin E several times a week, to keep the polyunsaturated fats in my body and brain from going rancid (oxidizing). And, yes, I keep fish oil capsules on hand, for the times when I run out of sardines, or if I feel my skin getting dry or my joints and muscles achy, especially in chilly weather.

Do you suppose the last 50 years of American history would have been different if Franklin D. had quit smoking and....aw, what's the use of speculating.



*Illustrations are by Clay Geerdes and other artists as noted.*

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