JUNE 1977 • 50¢

National Health Federation BULLETIN

SACCHARIN:

Will We Let It Cripple Or Destroy the Delaney Amendment?

They're Fighting Dirty!

Stakes Even Higher For 'Us' Then for Chemical Industry

VITAMIN C AND SCURVY/CANCER

IRWIN STONE

Syndrome: Veteran Researcher Irwin Stone Updates Its Effectiveness, Wonders Why NCI Treats It Like 'Hot Potato,' and Says 'We Could Have Cancer-Free World If Large-Scale Testing Were Started Now'!

INDIANA DID IT! LED BY DR. HELEN CALVIN, LAETRILE PATIENTS TRIUMPH OVER GOVERNOR WHO VETOED BILL AFTER SAYING HE WOULDN'T; READ ABOUT THIS CLIFF-HANGER TO THE LAST 20 MINUTES

MEMORIAL LIBRARY'S Gift of 16½ Valuable Lots From Donors Who Tell Why It's 'Best of Two Worlds' Gift Taxwise and Educationwise

DR. WACHTER

Dedicated to the Protection of Health Freedoms

THE
NATIONAL HEALTH FEDERATION
BULLETIN

Protection of Health Freedoms — Published Monthly

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Are the Animal Experiments Irrelevant?

Those Rat Tests Translate Into 6,000 Saccharin Deaths a Year

The storm raised against the March 9 FDA proposal to ban saccharin has been channelled into an attempt to revise the 1958 Delaney Amendment which says "no (food) additive shall be deemed safe if it is found . . . after tests appropriate for evaluation of the safety of food additives, to induce cancer in man or animal."

The clause does not allow for a "balancing" of "risk and benefit."

Eleven days after the FDA announcement that the additive would be outlawed because it has been found to produce bladder cancer in rats, the industry-sponsored Calorie Control Council of Atlanta, through costly newspaper ads, was blasting FDA for its decision to ban saccharin.

A former FDA chief, Dr. Herbert Ley, Jr., who lost his job seven years ago during the hassle over the banning of cyclamates, in a March 16 news conference called by the Grocery Manufacturers of America, predicted that within a few months the law would be revised to permit use of saccharin or some other artificial sweetener.

The Food and Drug Administration said it welcomed Dr. Ley's comments, and "agrees with him on the need to reexamine the law that determines how the FDA regulates food safety. The entire Delaney clause in all its applications is a proper subject for public discussion and debate."

Officials of the Oregon Diabetes Association urged Oregon's 100,000 diabetics to write their congressmen urging action to abolish the ban.

And Dr. Irving Kessler of Johns Hopkins University charged the ban on saccharin — and cyclamates — is based on "ridiculous" animal studies, and is misleading. (Ed. note: We have no background on who has been paying for Dr. Kessler's research on artificial sweeteners but the reader may draw conclusions from his comments as reported by Hearst Writer Joann Rodgers:

"Dr. Kessler's research on more than 1,000 patients showed 'absolutely no evidence whatsoever that saccharin or cyclamates caused bladder or any other kind of human cancer in the amounts humans ingest them . . . The main message of this latest FDA ban has nothing to do with saccharin, but a lot to do with the legal rules that exist in our country which control what things are allowed and what things are banned. If a mouse or two develop tumors of any kind after any dose of any food or drug, then by definition under the Delaney Clause of the Pure Food and Drug Act, that substance can be considered a human carcinogen and taken off the market. This clause was promulgated in good faith to protect the public from cancer, but its effect is simplistic, misleading, and ridiculous . . . The real problem with rat tests and the Delaney Amendment is that they don't protect the public. What causes cancer in rats may not cause cancer in man. But more important, what does not cause cancer in rats may cause cancer in man.'

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"Dr. Kessler said the saccharin ban ought to become a rallying point for a total reconsideration of the Delaney Clause and the government's methods of guaranteeing the safety of food and drugs."

PRESSURE ON CONGRESS

A few congressmen, under pressure from the soft-drink industry and calorie-conscious citizens, were quick to take up the rallying cry: Representative Andrew Jacobs, Jr.. of Indiana on March 14 introduced legislation to allow the sale of saccharin but require that each container carry the message: "Warning: The Canadians have determined saccharin is dangerous to your rat's health." He asked his colleagues to cosponsor the bill to "ban the sacharin ban." And California's junior Senator S.I. Hayakawa said on March 15 that he would draft legislation to keep saccharin on the market. "There's a profound psychological need in most human beings for a taste of sweetness," he said. Removing the last artificial sweetener from the market "is asking people to do something quite impossible."

Among the newspapers calling for a change in the Delaney Amendment was the *Los Angeles Times*. An editorial (March 15) said in part: ". . . The saccharin ban threatens consequences that go well beyond economic damage to manufacturers and commercial users of the sweetener. The ban also threatens the well-being of millions who cannot have normal sugar — chief among them diabetics, for whom saccharin is the one remaining alternative to sugar. Additionally, of course, saccharin has millions of other users simply interested in keeping their caloric intakes down . . . The clear need at this point is for Congress promptly to take another look at the Delaney Clause. What is required is a modification of the law to give FDA greater flexibility in dealing with potential carcinogens among food additives, particularly when what is involved is a mandatory ban that demonstrably would do more harm than good. Saccharin, after all, has been around for more than 80 years, and has proved very useful. No one has yet produced evidence that any humans have developed cancer from ingesting it."

THE OTHER SIDE

To the credit of the *Times*, it published a well-researched article starting on Page 1 by its science writer, Robert Gillette, clarifying many points in the controversy:

". . .Elusive as the logic of (the Delaney Amendment) may seem to the general public," wrote Mr. Gillette, "medical researchers say the animal experiments upon which such regulatory decisions are based do have a sensible rationale — and that they do have a direct bearing on risk to humans.

"It is true, researchers acknowledge, that the rats at the center of this furore consumed each day the saccharin equivalent of roughly 1,000 cans of low-calorie soft drink. But they consider it misleading — if not dishonest — to suggest, as the Calorie Council has, that this disparity makes the research irrelevant to humans.

"Those who drink only one can a day of a saccharin soft drink run a comparably lower risk of cancer. But in a population of 213 million, the collective hazard still could add up to thousands of cases of bladder cancer.

"The rat experiments that led FDA to ban saccharin are essentially the same as those underlying earlier government decisions to restrict or ban the use of persistent pesticides like DDT and other food additives such as red dye No. 2. Feeding tests with rats also led the FDA in 1969 to ban cyclamates, the only other commercial synthetic sweetener.

"If anything, the saccharin experiments the Canadian government completed last year that led to the FDA action, were more sophisticated than most such feeding tests, according to Dr. Marvin Schneiderman of the National Cancer Institute."

EARLIER STUDIES

"And if the FDA's decision to ban the sweetener was wrongheaded, at least it was not precipitous. Two previous American studies, reported in 1971 and 1973, showed that large doses of saccharin — 5% of the diet in the first study and 7.5% in the second — produced significant numbers of bladder tumors in rats . . . (Ed. note: A 1951 FDA study also revealed cancer incidence in saccharin-fed rats).

"One problem, raised in objections by the Calorie Control Council, was that the saccharin used in the studies contained a contaminant (orthotoluene sulfanomide (OTS) that might actually have caused the tumors. The new Canadian study, however, appears to have laid that problem to rest. In an elaborate procedure, the government researchers used six different groups of 100 rats through two generations. The first group, fed a diet containing 5% pure saccharin, developed three bladder tumors in the first generation and 14 in the second. Four other groups were fed various doses of OTS. None developed tumors. The sixth group was fed a normal diet without saccharin or OTS and developed two tumors.

"To Dr. Schneiderman of NCI, the higher incidence of cancer in the second generation of saccharin-fed rats is not surprising, but disturbing. He said it suggests not only that saccharin crosses the placental barrier in mammals — as do many chemicals — but also that the sweetener may predispose a human fetus to bladder cancer later in life."

RELEVANT

"Medical scientists believe these and similar rat and mouse studies pertain to humans, to use Dr. Schneiderman's words, for two basic reasons: The first is a belief drawn from substantial experimental evidence that cancer is a "universal" disease among mammals. In spite of vast outward differences between mice and men, the causes and the biological processes of malignancy are thought to be essentially the same among all mammals. A chemical that causes cancer in one species therefore is thought likely to do so in others.

"The second reason scientists worry when rats contract cancer from food additives has to do with a well-established relationship between the dose of a carcinogen and its effect. Whether the agent is the ultraviolet radiation in sunlight, or X-rays, or a chemical, experiments show that high doses result in relatively high risks of cancer. The lower the dose, the lower the risk. But scientists are nearly unanimous in the belief that *no 'threshhold' exists* below which the risk of a carcinogen disappears.

"In screening chemicals to identify carcinogens, scientists put the 'high-dose, high-risk' rule to good use. They administer massive doses in order to minimize the number of animals needed to detect an effect if any are to be found. 'If we don't get a response at those levels, we figure the substance

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probably is pretty safe at levels humans encounter,' Dr. Schneiderman explained.

"It is not true that almost any chemical will cause cancer in animals if given in large enough doses, researchers emphasize. 'Most of the chemicals we test at these high doses turn out not to be carcinogens,' says Dr. Bruce Ames, biochemistry professor at UC Berkeley . . .

"Because cancer is mainly a disease of the elderly, feeding experiments must run most of an animal's life-span. Mice and rats live two or three years, whereas dogs live 10 to 12, and primates such as chimpanzees may survive 35 years or more. (What's more, at $30 apiece, rats and mice are among the cheapest test animals) . . .

"According to a statistical rule of thumb, a chemical capable of causing three malignancies among 100 animals has a 5% chance of producing no tumors at all in any given group of 100 — thus falsely giving the chemical a clean bill of health.

"But what exactly does a positive finding mean, as in the case of the Canadian saccharin study? Qualitatively, researchers can say with some confidence that saccharin is also likely to cause cancer in humans.

"But can high-dose feeding studies be used to estimate — in numerical terms — the real risk to humans? The question is important if Congress is to abandon the Delaney Amendment's requirement of absolute safety, and shift instead to a balancing of risks and benefits."

6,000 MALIGNANCIES

"The Canadian study, for example, produced three tumors in the first generation of 100 rats using daily doses of saccharin about 1,000 times larger than those humans might in-

RECLASSIFYING

FDA announced April 13 the proposed ban on saccharin as a food additive would remain in effect, but the substance would be reclassified as a nonprescription drug.

gest. To have detected an effect at human levels of exposure, however, might have required tens of thousands of rats.

"If people are as susceptible to cancer as rats — as some scientists believe — then the odds of a man, woman or child contracting bladder cancer might be three in 100,000. In a population of 213 million, this roughly translates as a potential of 6,000 malignancies. Little experimental information exists, however, to support this quantitative leap from mouse (or rat) to man. According to Dr. David Rall, director of the National Institute of Environmental Health Sciences, there is only a handful of recorded cases in which animals and humans have clearly contracted cancer from similar doses of a specific chemical. But Dr. Rall says that in those few opportunities that do exist for comparing the susceptibility of animals and humans at the same dosage, the animals seem to reflect human risks 'with reasonable accuracy.'

"At the same time, he wrote in a recent research paper, the greater number and variety of living cells in humans that are potential targets for carcinogens suggest that humans, overall, may be more vulunerable than animals.

" 'One man may represent anywhere from a 160- to a 3,000-mouse experiment in terms of susceptible cells. And if there is a relationship between the initiation of a (malignancy) and the number of susceptible cells, then one man certainly is much more susceptible than one mouse.'

"If that is so, then why in 80 years of use, has no direct evidence surfaced of saccharin's harm to humans? Dr. Kurt Isselbacher, chairman of Harvard Medical School Department of Medicine, says it is not for lack of looking. Dr. Isselbacher, who thinks FDA should make saccharin available at least to diabetics and obese persons, said studies at Oxford, Boston and Baltimore dating back to 1935 and covering about 20,000 persons, 'have clearly shown no indication to date' of more bladder cancer in those who use saccharin than in those who don't.'

"Other authorities, including NCI's Schneiderman, are less confident of saccharin's safety."

GETTING HUMAN DATA

"There are two ways of picking up a carcinogen from human data, he said. Statisticians either must notice an 'enormous increase' in a common variety of cancer (as in the lung cancer associated with smoking), or a small increase in a very rare form as in the appearance of some 20 cases of an extremely rare liver cancer among workers in the plastics industry that led in 1974 to the identification of vinyl chloride gas as a potent carcinogen.

"Bladder cancer is fairly common, with about 30,000 new cases in the U.S. each year, predominantly among men in their 50s and 60s. In all probability, Dr. Schneiderman says, saccharin might have led to a relatively small annual increase of 1% or 2% that would be hard to discern even over decades. That is not to say, however, that the toll in lives would be trivial.

"Although Americans have consumed saccharin throughout the century, it was only in the 1940s and 50s that it came into general use. If, as the Canadian rat study suggests, the fetus bears the highest risk of induced cancer, then, Dr. Schneiderman says, the first large numbers of Americans with an elevated risk would only now be in their mid-30s. By this reasoning, it may be another 15 years before a detectable saccharin-related rise in bladder cancer would be expected in the U.S. population.

" 'Bladder cancer has in fact increased,' he says. 'We've generally attributed this to smoking, but perhaps we were wrong.'

"The government of course has not banned smoking. One reason is that the controversial Delaney clause doesn't apply to tobacco because it isn't a food additive. But there is another essential difference: One may choose to smoke or not, but avoiding food additives is more difficult . . .

"Congress, aroused by the public outcry, seems in a mood to rethink the absolute requirement of safety imposed by the Delaney clause. But any alternative process of balancing risk against benefit must inevitably take place amid overlapping shadows of fragmentary data and conflicting hypothesis. And scientists, it is safe to say, are ill-equipped to help."

ECOLOGY BE DAMNED

For the second year, the California Legislature has rejected a ban on the manufacture, sale, and use of fluorocarbon aerosols. The threat of loss of jobs appeared to be the deciding factor in the 39-37 Assembly vote against the measure.

'Make Saccharin a Prescription Item'

Delaney Clause Attacked to Save Diet Sodas: Turner

BY JAMES S. TURNER

In a ham-handed announcement remarkable even for an agency with a well-established reputation for insensitivity, the Food and Drug Administration (FDA) announced in March that it planned to "end the use of saccharin in our foods and beverages."

Since the announcement, public hysteria and misinformation have vied with each other for the attention of the Congress and the media (see CNI Vol. VII: 11). The agency itself set off the response by saying in its official announcement that the dosages of saccharin fed the rats in the Canadian study were "in excess of the amount a consumer would receive from drinking 800 twelve-ounce diet sodas daily over a life time."

The agency did not make clear that the Canadian government studies on which it relied used standard scientific procedures, including amounts of saccharin normally used in animal feeding tests to detect pathology or injury to animals. It left the saccharin decision couched in the 800-bottle mythology to dangle slowly in the wind. (This style of presentation led some cynics to suggest that the agency wished to undermine its own anti-cancer authority).

This article first appeared in the Community Nutrition Institute newsletter, Washington, D.C. Mr. Turner is author of The Chemical Feast, and Washington representative of the National Health Federation.

The agency also misled the public into believing the ban took immediate effect. Thus' "precipitous" began to crop up in discussions of the *proposed* ban. Actually, the agency plans to hold a series of hearings to determine what course of action the science and the law of the case requires or allows.

As the agency undertakes the process prescribed by law, it will hopefully sort through the mess created by its public posture to the hard ground of fact that supports the saccharin ban. In the process, it might be possible to put to rest once and for all a number of myths that have grown up around the food additive regulation.

First among these myths concerns the legal power attributed to the so-called Delaney Clause. This clause, according to the myth-makers (including to some degree the FDA itself), causes all the problems. It requires the banning of substances without scientific support, they say. If the Clause goes, saccharin can be saved, they argue.

The first shock to the attackers of the saccharin ban will come when they discover that sound scientific data and argument will require the ban of saccharin with or without Delaney. They might then stop to examine the Clause and discover that sound scientific principles support it.

The second myth to go will be the belief that saccharin has been used for over 80 years without controversy. In fact, the father of the Food and Drug Act, Harvey W. Wiley, was a determined enemy of the sweetener and in 1907 lost much of his regulatory authority in a futile effort to ban the substance. Ira Remsen, the president of Johns Hopkins University (claimed to be the discoverer of the sweetener), had more political clout with his friend, Teddy Roosevelt, than Wiley did. Remsen was made head of a committee assigned to review all of Wiley's food safety decisions. This committee laid the groundwork for the Food and Drug Act of 1938 by gutting the Pure Food Act of 1906.

REPEATED WARNINGS

From 1911 to 1938 saccharin was available to consumers as a drug but was barred from the general food supply because of concerns about its safety. From 1938 to 1959, the year the diet soda revolution began, saccharin could be a drug or special dietary food and was carefully controlled by the FDA to be available to those with special medical needs. For most of the past decade the FDA has repeatedly warned the public and the diet food industry that saccharin probably posed a cancer danger. So it is a myth to say the substance has been used without controversy for 80 years.

Myth Three contends that no substitutes for saccharin exist. Untrue. FDA's warnings over the past few years have not gone unheeded. Currently the Diet Delight line of food from the California Canners and Growers, which lost $20 million on the cyclmae ban, uses saccharin in only 8% of its foods. In the rest it uses juice from Thomson seedless grapes. Both Coca-Cola and Dr. Pepper have announced their readiness to shift to standby diet drink formulations. Alternatives to the use of saccharin in the mass market of food and beverage manufacturing markets do exist. As for sweeteners for coffee, tea and other tabletop items, where about 25% of saccharin is used, there is nothing to prevent the use of any substance with legitimate medical uses, including saccharin, from being approved by the FDA as an over-the-counter or prescription drug.

The 800-bottle-a-day myth will also disappear under careful scrutiny. First, when a chemical causes cancer in a high-dose study, it constitutes a warning that the substance will probably cause cancer in lower-dose studies. Scientists do not know of any safe dose for a chemical that causes cancer at high doses. In fact, FDA removed saccharin from the list of food chemicals "generally recognized as safe" (GRAS) in 1972 after a suggestion of its cancer-causing potential showed up in a study using the equivalent of only 1½ bottles a day of diet soda.

It should be recognized that the life expectancy of a mouse is under three years. This relatively short life-span is one reason such high doses are used in standard studies. High doses are also used to make allowances for the small number of animals generally used in animal tests. The Canadian saccharin study used only 200 rats. If a chemical causes cancer in one person in a million, it is not safe enough to use in the mass food supply. Large doses are used in order to help detect this one-in-a-million danger in a study using only 200 individuals. Large doses also are used to help detect dangers that might show up over longer periods of time. It takes in excess of 20 years of exposure to many known cancer-causing chemicals before the disease shows up in individuals.

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DELANEY CLAUSE

For the moment, the major part of the anger and misinformation is focused on the Delaney Clause, which states that no food additive "shall be deemed to be safe if it is found to induce cancer when ingested by man or animal, or if it is found, after tests which are appropriate for the evaluation of the safety of food additives, to induce cancer in man or animal . . ."

The Clause is part of a larger statutory framework established by the Food Additive Amendments of 1958. The heart of this framework prohibits approval of a food additive "if a fair evaluation of the data before the Secretary — (a) fails to establish that the proposed use of the food additive, under the conditions of use to be specified in the regulation will be safe . . . " FDA officials already have testified that under this section of the law — apart from the Delaney Clause — it would have to ban saccharin.

The agency defines safe as showing "there is no significant risk of harm from using the substance as intended." The finding of 17 malignant bladder cancers out of 200 rats tested establishes a significant risk by currently-accepted scientific yardsticks. Current scientific thinking makes it clear that whenever a standard procedure establishes that a chemical causes cancer in animals, that chemical cannot be considered safe for consumption under the food additive amendments — with or without the Delaney Clause.

'POLITICAL NECESSITY'

The Delaney Clause thus is a regulatory redundancy. However, it is also a political necessity. It would be virtually impossible for a regulatory agency to withstand the kind of organized, hysterical and ignorant pressure being generated against the saccharin ban without the existence of the Delaney Clause. The very fact the agency cited the Delaney Clause as grounds for banning the sweetener, even though such citation was not necessary, demonstrates the political necessity for the Clause.

Eliminate the Delaney Clause and agency temerity will dominate decision-making. In concluding a National Academy of Sciences (NAS) Forum on Food Additives in 1973, Dr. Philip Handler, NAS president, said, "For my part, I begin to view that (Delaney) Clause as a great red herring rather than as a problem in our society. Certainly, on its face, all other things being equal, it is a perfectly rational guide to desirable societal behavior. No one in his right mind wants to put carcinogens into anything intended for human consumption. We should be perfectly willing to accept that guideline until the day when we find ourselves in the position of banning as a carcinogen some chemical entity which also offers great benefit."

MEDICAL FUNCTIONS

Saccharin as a food additive does not offer great benefit. In 1969, relying on scientific data including several NAS reviews, FDA reported that "none of the few controlled studies reported to date have established a useful role for nonnutritive sweeteners as weight-reducing aids except under the most carefully controlled conditions." In one controlled study carried out in the early 1950s by the Harvard School of Public Health and Peter Brent Brigham Hospital involving 247 obese individuals and 100 diabetic persons, no significant difference was apparent when the weight loss of users and nonusers of low calorie diet foods was compared.

Because of its effects on blood sugar, saccharin consumption may actually stimulate appetites — some animals on artificial sweeteners have actually gained rather than lost weight. Saccharin is clearly not a chemical entity that should be added to the normal food supply under any circumstances. It is ridiculous to argue that its value is such that the ban should cause reevaluation of the Delaney Clause.

This is not to say that saccharin should not be available for use by diabetics or others for whom it performs a legitimate medical function. However, *treating saccharin as a drug is the proper method to make it available to those who have medical need of it.* In 1911, based on crude human feeding studies performed before passage of the 1906 Pure Food Act, the food regulators declared saccharin to be a poisonous and deleterious substance banned from use in normal foods. They did allow saccharin to be used as a drug. This manner of dealing with the substance preserved its legitimate functions and discouraged exploitation of a phony weight-loss market.

DIET SODA CRUSADE

The real objective of the anti-Delaney crusade is to preserve the diet beverage industry. Virtually all other current uses of saccharin could be preserved by subjecting it to the drug portions of the Food and Drug Act. The strategy of the anti-Delaney crusade is to escape the Food and Drug provisions of the Act by diverting attention to the Delaney Clause, which is truly a red herring.

There is no risk-benefit balancing in the food section of the Act, and there should not be. If a chemical is to be added to the general food supply, it should be free of harm or any significant risk of harm. Since there is no balancing in the food section of the Act, proponents of saccharin are free to *claim benefits that do not exist without providing proof for their claims.* This fact is the true well-spring behind the current anti-Delaney crusade.

On the other hand, the drug sections of the Act do provide for clear risk-benefit tradeoffs. In this portion of the Act, both the lack of risks and presence of benefits must be demonstrated — the presence of benefits must outweigh the pressure of risks. The proper framework for the saccharin debate is not the Delaney Clause/Food Additive Safety Sections of the Act, nor safe and effective sections of the drug portions of the Act, so the debate must be moved. Once moved, Congress can get out of the business of regulating selected single chemical entities and back to making policy.

In summary: the saccharin debate is being turned into a Delaney debate. This is a diversionary tactic designed to save diet sodas. Saccharin has been a poisonous and deleterious substance under food law for nearly 75 years. It has been allowed for special medical uses under the drug provisions of the Act and for narrowly-prescribed special dietary uses until the diet soda explosion of the 1960s.

The Delaney Clause in no way touches legitimate medical uses for saccharin, which can continue as they have for most of the century under the drug provisions of the Act. The first step toward clearing the air is to establish as the issue the advisability of saving the diet soda industry, which as yet has no demonstrable health value. Neither the Delaney Clause nor saccharin need be banned.

Nobel Virologist Scores Cancer Society

ACS 'PLAYING INTO HANDS OF DIET-DRINK PRESSURE GROUP'

The American Cancer Society was severely dressed down (April 2, during a science-writers' seminar in Sarasota, Fla., sponsored by ACS) for giving in to pressure and doing the public "a disservice" with its stand in the saccharin controversy.

Dr. David Baltimore, Nobel Prize-winning virologist at the Massachusetts Institute of Technology, said the society was setting "an extremely dangerous precedent" in proposing relaxation of federal food-safety laws to make an exception for the noncaloric sweetener.

The cancer society, he said, "has been playing into (the) hands of a special diet-drink group called the Calorie Control Council instead of standing guard over the foods Americans eat.

"The final sentence of the (ACS) statement . . . says that saccharin requires special review by Congress. I think that's opening the possibility for any industry with enough lobbying power to try to defeat the Delaney Amendment — one of the rare pieces of legislation that is simple, straightforward, and relatively well-defined. . ."

Many other scientists here for the weeklong seminar timed to coincide with the society's annual April fund drive — also criticized what some referred to as "caving in" by the society to pressure from prosaccharin forces.

Alan C. Davis, a vice-president of ACS, said there had been pressure on the New York national headquarters to produce a statement for the society's 58 regional divisions to use in answering complaints and questions on the proposed ban. He said many divisions had been warned by supporters they would withhold donations unless the society made it clear it was not supporting the saccharin ban. He denied the grassroots sentiment had anything to do with the society's policy statement of March 25.

Earlier at the seminar, Dr. R. Lee Clark, ACS president, a director of the M.D. Anderson cancer-treatment center in Houston, and a member of the three-man President's Cancer Panel that helps set policy for national cancer efforts, derided the methods of Canadian scientists who established the cancer-causing potential of saccharin.

—William Hines
Chicago Sun-Times

A DRUG STORE ITEM IN CANADA

While the president of the American Cancer Society was critical of the Food and Drug Administration for the proposed ban on saccharin, in Canada the proposal was approved by the Canadian Diabetic Association and the Canadian Medical Association.

Canadian government officials plan to make saccharin available in pharmacies as of Sept. 1 — an option also open to FDA.

Ruth Desmond Writes Paul Rogers

Homemakers' Federation Against Weakening of Delaney Amendment

The Federation of Homemakers, Box 5571, Arlington, Va., is urging members to "phone or write your Representative and Senators to urge that the Delaney Amendment in the two Additive Acts be kept unchanged."

In a message to the membership, President Ruth Desmond commented that "Unfortunately FDA did not state *immediately* that even now, recognized, responsible cancer researchers sincerely believe they cannot determine a safe dose of a carcinogen.

"In two acts, the Delaney Amendment forbids use of a substance which by appropriate tests causes cancer in animals or man, to be in our food supply. This amendment applies only to the color additives and food additive acts. FDA used scientific judgment in banning cyclamates and DES — cyclamates was on its GRAS list (Generally Recognized as Safe), and DES is an additive for animal feed, specially exempted until it could be found in the carcasses of slaughtered livestock. FDA removed saccharin from the GRAS list and placed it on an interim basis on its food additives list. So saccharin came under the restriction of the Delaney Amendment.

"In the alarm over the proposed saccharin ban, the FDA and certain members of Congress have an opportunity to do the public a great disservice — namely cause this needed protective Delaney anticancer amendment to the additives bills to be greatly weakened or even eliminated.

"The many FDA tests over the years reveal saccharin to be more harmful than cyclamates. It should have been removed from the food supply some years ago. At the House Commerce Subcommittee hearing March 21, Ms. Annie Galbraith, R.D., immediate past president of the American Dietetic Association, and associate director of the dietary department, Massachusetts General Hospital, testified it was possible to give diabetics desserts sweetened with fresh fruits and fresh coconut or pineapple juice."

ROGERS LETTER

In a letter to Congressman Paul Rogers, chairman of the Subcommittee on Health and Environment, House Commerce Committee, Mrs. Desmond noted:

"Now that recent Canadian research on effects of saccharin definitely links it to bladder cancers in research animals — it is significant that in the Oct. 1, 1973, issue of *Food Chemical News*, pages 10-11, there is note that researchers at the National Institute of Environmental Health Sciences have recommended that regular users of saccharin might find it 'beneficial if they would occasionally discontinue its use for several days and allow for tissue clearance.' The article said it was presumed from animal studies that saccharin has a tendency to concentrate in the bladders and gastrointestinal tracts of regular users.

"My husband has been valiantly

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fighting recurrent bladder cancer for many years. I would *never* knowingly permit him to ingest a carcinogen deliberately added to his food. When he suffered an attack of kidney gravel, his bladder cancer was discovered. His surgeon said it was very fortunate the cancer was discovered *before* it became advanced. Usually victims discover bladder cancers only when they are advanced. The tests for detection are exceedingly painful.

"Over the telephone March 18, NCI said it is estimated there will be 30,000 new cases of bladder cancer in 1977. Our group's concern is for the many who may be suffering from undiagnosed bladder cancer (particularly children), and from other types of cancer. Should they be ingesting a carcinogen? Certainly the pregnant should be warned to protect their unborn babies from carcinogens.

"For these reasons and many more — as well as the views of respected researchers — this group not only supports the proposed FDA action to ban saccharin from the food supply of the general population, but it also supports, as it has since 1958, the continued keeping of the protective Delaney Amendment in both our food additives and color additives bills."

SCIENTISTS' VIEWPOINT

Mrs. Desmond told *The Bulletin* she has talked with both Dr. John O. Nestor of the FDA and Dr. Jacqueline Verrett about the dangers of using saccharin. "Both feel strongly that it should have been banned long ago — at the time of the cyclamate ban. Of course I am shocked that this decision has sparked action to weaken or even destroy the needed Delaney anticancer amendment to the color additives and food additives acts.

"Apparently there has been a housecleaning at NCI, and the recognized cancer researchers who stated positively that no one can yet set a safe dose of a carcinogen *to be added* to food have been fired — or have chosen to leave."

NESTOR WRITES *STAR*

Dr. Nestor, a controversial figure at FDA, wrote *The Washington Star* (3/19/77) describing as "naive" an editorial critical of the saccharin ban. He said in part:

"In my opinion, the following points demonstrate that you are naive, and that the Delaney Amendment is both good science and good law:

" (1) A large percentage of cancers now developing in our population are due directly or indirectly to extrinsic factors such as food additives, chemicals, radiation, viral infections, etc.

" (2) At present, there is no known minimal or threshold dose below which a carcinogen can be considered safe.

" (3) Our present bioassays (animal experiments) involving only a limited number of animals (a few hundred at the most) are insensitive. Thus, when positive, they indicate the substance being tested is a strong carcinogen. To detect weak carcinogens requires testing thousands of animals. Accordingly, we must pay great attention to the warning signal represented by a positive animal test.

" (4) Practically without exception, substances that have been found to be carcinogenic in man have also proved to be carcinogenic in animals. We must assume that any substance which is carcinogenic in animals could also be so in man. We cannot wait for the outcome of lengthy and complex epidemiological studies in man . . ."

'Can't Be Sure What Is a Safe Level'

In Canada, the law doesn't mention carcinogens specifically, reports George P. Brimmell in *The National Observer* (3/26/77), it simply states: "No person shall sell an article of food that has in or upon it any poisonous or harmful substance."

But the government's Health Protection Branch constantly monitors research on foods and additives, and whenever doubts are raised, the burden of proof that the food is not poisonous or harmful falls to the manufacturer. And the final authority rests with the government.

So while Canada has no law comparable to the Delaney Clause, and officials are given more leeway in determining when risks outweigh benefits, the results — where saccharin is concerned — have been the same. Both the U.S. and Canada announced bans on saccharin after reviewing results of the Canadian tests . . . Concerning cancer, one Canadian government official says: "We don't know that much about cancer, how it is produced . . . Therefore we can't be sure what is a safe level."

Author Urges Support of Saccharin Ban

Delaney Amendment Threatened, Believes Beatrice Trum Hunter

Fear that the saccharin ban may result in a weakening of the Delaney Amendment has been expressed by Beatrice Trum Hunter, Hillsboro, N.H., author of nine books and authority on food additives.

In a letter to *The Bulletin*, Mrs. Hunter said she hopes those "interested in health and safety will write President Carter and Congressmen, as well as FDA and HEW, commending the proposed ban."

After observing that saccharin's safety was challenged almost as soon as it was introduced, and that in 1951 three FDA scientists reported that saccharin at certain levels showed a high incidence of unusual combinations of cancers, that there are "other problems such as blood coagulation and urticaria, and noting that she reported this in *Consumer Beware!* and *The Mirage of Safety*, she continued:

"FDA's press release of March 9 stated, *without any explanation*, that the dosages in the Canadian study were in excess of the amount a consumer would receive from drinking 800 12-ounce diet sodas daily over a lifetime. FDA must have known that such a statement plays right into the hands of those who oppose the ban, and the statement is repeated endlessly, without being understood.

"The Canadian studies followed a classic and well-accepted toxicological technique. Massive amounts always are used in such safety tests in order to overcome the limitations of the small numbers of animals used (compared with our total population of more than 200 million persons), as well as for the short duration of exposure (compared with our human lifespan). The massive dosage in such

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tests does *not* induce carcinogenesis. The substance either is carcinogenic or it is not, and this quality is *not* dose-related. The Canadian tests were well done, and the FDA had to admit the results showed 'unequivocally' that saccharin induced malignant bladder tumors in rats. My fear is that the FDA proposal for banning will not take place, but rather that those who oppose the ban will succeed in weakening the Delaney Clause which, weak as it is, is the only instrument standing between the public and opening of the floodgates for many more carcinogenic substances about to be spewed into the environment. Rather than being weakened, the Delaney Clause should be strengthened by being extended to include teratogenic and mutagenic substances as well as carcinogenic ones.

"Contrary to popular notion, the Delaney Clause is not rigid, arbitrary, unscientific. As the Clause has been interpreted, it allows room for scientific evaluation, and time for considered deliberations. Otherwise saccharin would have been banned long ago. But FDA never has vigorously supported the Clause and has given only lip-service support. The agency has resorted to using the Delaney Clause on only eight occasions in nearly two decades of the law's existence . . . The agency chose not to use it in cases where it should, for stronger legal support — as in DES.

"Even if the ban is instituted, diabetics and others will not be left high and dry. FDA can easily reclassify saccharin as a prescription drug for those who feel they need it medically. (Personally, I believe that such persons who depend on saccharin for medical reasons would be better off changing their food habits so they do not eat foods and beverages requiring sweeteners).

"The real problem is not with the diabetics, but with the huge population that has been on the dietetic soft-drink and dietetic food kick, and the manufacturers of these undesirable, but profitable, items. They are exerting tremendous pressures to see that the ban does not become effective, and also are attempting to weaken or destroy the Delaney Clause. The intent of FDA's 1972 limits imposed on saccharin was to discourage the general use of saccharin and to prevent an increase in its use. But it is obvious the agency did nothing to educate the public, nor to dissuade food and beverage processors from continuing to proliferate their wares. Economics overrides health considerations.

"Since the pressures are enormous, members of National Health Federation and others interested in health and safety should write letters to President Carter and Congressmen, as well as FDA and HEW, commending FDA's proposed ban. We must act as a counterforce."

NEW NHF PHONE NO.
(213) 357-2181

Because Federation activity and member interest has increased to the point two telephone lines do not handle the incoming calls (a check by General Telephone revealed 58 busy signals one day in December), a new number has been designated to accommodate addition of two lines: The National Health Federation number in Monrovia, Calif., is now (213) 357-2181. When the former number is dialed, the calls are intercepted and the new number given.

Ida Honorof Recalls Some History

Saccharin Banned Abroad Soon After Its Discovery in 1879

Warned in 1913 by Dr. Harvey Wiley, "father" of the pure Food and Drug Act, that "saccharin is a dangerous drug and even in small doses is harmful to the human system," it nevertheless was not banned until the recent proposal to take it off the market.

This information was contained in a letter by Consumer Activist Ida Honorof to the *Los Angeles Times* following publication of its editorial opposition to the ban.

Ms. Honorof said she is "amazed that *The Times* has jumped on the bandwagon, condemned the ban on saccharin, and attacked the Delaney Amendment, the only protection we have against carcinogens in our food supply. To deliberately allow a known carcinogen in our food is unconscionable. Saccharin should have been banned years ago, except that President Theodore Roosevelt needed a substitute sweetener and wouldn't allow saccharin to be taken off the market.

"Let's examine the facts. In 1913, Dr. Harvey Wiley . . . informed people (about saccharin). It is a coal-tar product, synthesized in 1879. By 1890 France's Commission of Health Association decreed saccharin harmful and forbade its manufacture or import. Eight years later the German government limited its use and banned it from food and drink. Similar actions were taken in Spain, Portugal, and Hungary.

"As early as 1951, three FDA scientists reported that saccharin at certain levels showed high incidences of unusual combinations of cancer. FDA

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Saccharin Would Be Magic Word . . .

On the basis of information she has received from "an unimpeachable source," Consumer Activist Ida Honorof charges that "the entire scenario — how to attack and destroy the Delaney Amendment — was orchestrated at a National Cancer Institute (NCI) conference in Williamsburg, Va., Jan 30-31, 1974."

Between 50 and 70 persons were present, representing the NCI, FDA, and WHO, Ms. Honorof reported in her newsletter, *Report to the Consumer* (April 1977):

" 'It was a very peculiar conference. Their main concern was — what data do you make available to the public — people might give under pressure?' The discussion centered around the fact that 'once a study on carcinogenicity is done, material should not be suppressed — you're obligated to publish it.'

"They were running into problems with additives. Industry was leaning on Nixon . . . the work the scientists were doing meant the FDA would invoke the Delaney clause. An attempt was being made to get around the embarrassment of a commonly-used additive. Then saccharin came up in a peculiar way during the final session . . . 'If you were to challenge the Delaney Amendment, it would have to be with a common article like saccharin — that was the only way to do it.' "

Diabetic Builds Date Sugar Business

Within days after the proposed saccharin ban was announced, orders for the date sugar produced by Jeanne Jones, 7730 Herschel Ave., La Jolla, Calif., started escalating. She told United Press International "Suddenly I'm in a different ball game — I'm filling the need for the whole world."

A diabetic, author and lecturer on nutrition, Mrs. Jones started "playing with" date sugar recipes in 1968 after learning she had diabetes. Since 1972 she has written three cookbooks.

When she learned date sugar was difficult to find even in health food stores she contracted for the entire crop of a Coachella Valley (Calif.) date grower for processing into date sugar.

Before settling on dates as a source, she experimented with other fruits. Dates are high in potassium, fairly high in fiber, have fewer calories than sugar, and finely ground, possess the consistency of coarse sugar. Its only drawback: it cannot be used to sweeten beverages, won't dissolve in hot water.

chose to ignore this report. These were the same tests that were made on cyclamates, and the same results were obtained — bladder cancer — back in 1951. Yet the FDA waited all these years to act. In 1969, Dr. George Bryan, a tumor expert and cancer researcher at the University of Wisconsin Medical School, reported that he had produced bladder cancer in 47% of the mice in one group, and 52% in another. At a press conference he said that although the direct cancer hazard to man had not been established, he was suspicious, and said it would take some years before it would be known exactly how dangerous the substance is. Until then, he recommended its use restricted to those requiring it for medical reasons.

"There is no such thing as a little bit of cancer, any more than there is such a thing as 'a little-bit-pregnant.' The $18,000 double-page ad in the Sunday *Times* (March 15) (which probably ran in every major newspaper in the U.S.), bought by the Calorie Control Council, gives us a small idea of the profit in saccharin. You can bet your bottom dollar the entire pharmaceutical industry is behind the push to have the FDA reverse its decision — and also to emasculate the Delaney anti-cancer amendment.

". . . Our people, lulled by Madison Avenue shuck, have grown accustomed to convenience-processed (foodless) foods. Groups such as Weight Watchers, and even Diabetes Associations, are challenging the one law which protects us from carcinogens in food. These people must begin to understand they must not use either refined sugar or sugar-substitutes. They must learn they can get natural sweeteners from fruits, vegetables and grains. Only then will we combat cancer, diabetes, and all degenerative diseases.

"The FDA must be supported and complimented for finally doing what should have been done 25 years ago when the first reports were released proving that saccharin is a carcinogen. Congressman James J. Delaney should be commended for his Delaney Amendment, the people should be thankful there is even a handful of public servants in Washington and Sacramento who protect the public interest.

"P.S. Please bear in mind that saccharin is used not only in food, but in metallurgy as a component in nickle brighteners, for electroplating."

Benefits to Donor, Recipient Described

Wachters Donate 16½ Lots To NHF Memorial Library

Dr. Joseph V. Wachter and his wife, Anita, have presented to the National Health Federation Memorial Library 16½ lots located in Clearlake Highlands, Calif.

"We are delighted with the concept of the library, and believe that in this way we, and others, can contribute to the further education of earnest and devoted seekers of health, nutritional, and other information which will become increasingly available to the Memorial Library as funds are realized from donations and other support," said Dr. and Mrs. Wachter.

President of Wachters' Organic Sea Products Corporation, Burlingame, Calif., manufacturers of food supplements using blends of sea vegetation, Dr. Wachter has acted numerous times in the past as lecturer and master of ceremonies at Federation conventions. A life member, he has been a loyal supporter of the Federation, devoting time to its activities. He hopes this property gift, the most recent of his endeavors, "will act as a beacon light for those desiring to support the Memorial Library in an intelligent, economically-sane manner."

Dr. Wachter points out that since the Memorial Library qualifies as a tax-deductible organization, gifts to it are tax-deductible in the year given. In his words, "Giving is the best of two worlds. In one, you get the satisfaction of supporting a positive, ongoing work of health education, and in the other you can accomplish this giving by making presentations not only of real estate, but works of art, jewelry, antique furniture, etc., at low economic cost to the donor."

He believes that as the nature of the economic value to the recipient, such as the Memorial Library, and the reduced cost to the giver because of the gift's tax-deductible status become known, "more and more individuals will initiate such donations in the months and years ahead."

He added that "under all circumstances, the tax and legal consequences of making such a gift should be checked with the donors' C.P.A. and attorney."

HEALTHNOTES NEW MONTHLY LETTER

A new monthly publication, *Healthnotes*, is being offered by Norman W. Bassett, publisher of *Bestways*, 466 Foothill Blvd., La Canada, Calif. 91011, at an introductory price of $12 a year (regular $16). The publication, said Mr. Bassett, will provide "concise up-to-date" information, with "sound advice on important nutritional dvelopments to help you maintain proper health, and to lead a wholesome, healthy, fuller life, and achieve the other endeavors you seek."

After Veto Override, Hoosiers 2nd to Legalize B-17

Indiana Laetrile Supporters Put Through Wringer, But Bill Okayed

High drama marked progress of the bill to legalize Laetrile in Indiana — and it didn't end until 20 minutes before the Legislature adjourned April 30 — after the Senate by a vote of 47-3 had overridden Governor Otis Bowen's veto of eight days earlier.

Although he had indicated publicly he would neither sign nor veto a Laetrile bill if it passed both branches of the Legislature, Governor Bowen, a medical doctor, did veto the measure April 20 after holding it for some time. He said it was changed from the bill he originally had agreed not to veto.

The bill permits the manufacture and use of Laetrile in Indiana — where apricots can be grown — and designates the State Board of Health and the State Pharmacy Board to determine the purity of the substance and control its labeling, but prevents it from being classified as a drug or food additive. "A perfect bill," said Dr. Helen Calvin of South Bend.

According to Dr. Calvin, who spearheaded the drive to get the 40,000 signatures on petitions asking for such legislation, the bill was called up for a vote by the House Speaker on Saturday morning, last day of the session. It passed by a vote of 74-15, and was sent to the Senate. Its supporters in the galleries then moved from the House to Senate chambers and sat from 11:30 a.m. to 11:40 p.m. waiting for Senate President Pro Tem Robert Fair to call it up for a vote.

He is one of the three who voted against the measure on its way through the Senate originally, the man who was about to kill it when its Senate "prime mover" failed to show to call it up for a second reading.

Dr. Calvin said the Laetrile patients and supporters in the galleries waited until noon while the Senator called up two other bills, then adjourned proceedings until 3 p.m. A few other bills were processed, there was a caucus on the budget, and the floor was virtually empty for hours. The bill's author in the House — Representative Danny Burton, encouraged the bill's supporters in the galleries to "stay with it, don't leave." He told Dr. Calvin early in the afternoon it probably would be a long wait before Senator Fair called it up. Another strong supporter of the bill, Senator Eldon Tipton, at 9:30 p.m. took the microphone and expressed indignation that "these patients, some of whom have traveled 150 miles to be here, are made to wait for a vote on this bill."

The spectators entertained themselves and the few senators on the floor with religious and patriotic songs. When it finally was called up by Senator Fair at 11:40 p.m., it took "two minutes" to take the vote — and it was all over. Victory for the cause of freedom of choice in Indiana — the second state to approve such legislation.

Dr. Calvin said at a press conference May 2 that "We didn't mind sitting there for hours, waiting, because some of the patients there have spent months and sometimes years waiting for results from cancer treatment, only

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to be told at the end to go home and die. Many left this country to seek relief for their disease, and some are still here. They were in the galleries on April 30."

Mrs. Jean Kulwicki of South Bend, who worked closely with Dr. Calvin and others for the legislation, described the harrowing experiences encountered when the bill reached the Senate after the House had approved the measure 85-10: After waiting four weeks before referring the bill to committee, Senator Fair finally took that action — but only after Laetrile proponents paid for an ad in the Senator's hometown newspaper (Princeton, Ind.) asking why he was holding it up.

At that point he referred the measure to Senator Julia Carson who became "prime sponsor." Mrs. Kulwicki said she and Dr. Calvin talked with Senator Carson and that "she assured us she was all for the bill and would support it and work for its passage."

Sometime later they went to Indianapolis with copies of an article on Laetrile by David Rorvik. Instead of hand-delivering the material to each Senator, they gave it to Senator Carson who said she would distribute it. Later they learned that it never was passed out by Senator Carson.

They charge that Senator Carson did "a flip-flop," and succeeding events would seem to bear that out: When the first committee vote was taken, she was not present. On the afternoon when the bill was at deadline to be called by Senator Carson for second reading to the Senate, she was reported to be in Washington, D.C. (she is a member of the National Democratic Committee). After Senator Tipton moved for the second reading, the motion was ruled out of order by Senator Fair. That ruling was overruled by the Senate as a whole, and the second reading was given. After the House bills on the Senate docket had been disposed of, Senator Carson appeared, leading some to wonder if she had been in Washington.

On April 5, Senator Carson called the bill down for the third reading. Before she voted yes on it, she did however tell her colleagues the bill

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DR. CALVIN LAUDED BY NHF PRESIDENT

Special tribute was paid Dr. Calvin by NHF President Charles I. Crecelius who praised her "initiative, courge, and her devotion to the cause of freedom of choice in health matters.

"Dr. Calvin took on the monumental job of going to the people in the battle to legalize Laetrile in Indiana. Thanks to her efforts, and those of her coworkers, some 40,000 names were obtained on petitions which went to the Statehouse. By the time that campaign was over, legislators — and the governor, regardless of his ultimate stand — knew this issue was important to Indiana residents, and the support of the pro-Laetrile position was evidenced in the final votes in the Legislature. That she was held in high esteem by those legislators was graphically demonstrated by the standing ovation given her on the floor of the Senate following its decisive vote. The National Health Federation salutes Dr. Calvin."

Dr. Calvin says however that "the real heroes are the Laetrile patients. Without them, there'd have been no victory."

WE GRATEFULLY ACKNOWLEDGE . . .

MRS. YOUNG

receipt of a check of $1,000.00 from the estate of Eugene Benjamin Klyce, a former resident of Treasure Island, Pinellas County, Fla., and thoughtful, generous member of NHF. Among the many provisions of Mr. Klyce's will was that setting forth the gift of $600 to each of 10 cities to provide for installation of "a parallel bar and three horizontal bars (low, medium and high) in a public park or beach for free use of teenagers and adults. Much equipment is provided for exercise of children, but very little for teenagers and adults outside of schools. In my opinion these pieces of equipment are the best for exercising the large muscles, and keeping the body in good condition. They are also fun to use."

— HELENA A. YOUNG
Assistant to the President

"is not worth the paper it's written on" — a quote which received considerable television and newspaper coverage.

Thoroughly "upset" over the governor's veto of the measure, NHF Executive Vice-President Clinton R. Miller declared: "Governor Bowen is a medical doctor belonging to that part of the establishment which believes Laetrile is worthless in cancer therapy. No matter his personal feelings, he did publicly state earlier in the year, and was so quoted in *Medical News*, that if the measure passed both branches of the Legislature he would neither veto nor sign it, but would let it become law. When it finally came to the 'do or die' stage, he renegged, and vetoed the bill with a lame excuse that the bill had been changed in substance and his earlier commitment thus did not hold. The governor may have pleased a coterie of professional and bureaucratic friends by that veto, but we hope, and believe, that he also signed his political death warrant. Indianans are not going to stand still for that kind of performance in their governor. The next time he asks for votes, this incident will be remembered, at the polls, by enough Indiana citizens to hopefully make the difference in his bid for office."

EUGENE QUALIFIES

A proposal to eliminate fluoridation in Eugene, Ore., has been qualified for the ballot, probably at the June election, following filing of 11,000 signatures with the city clerk.

NEW NHF CHAPTER IN PENNSYLVANIA

The Western Pennsylvania Chapter of the National Health Federation is off to a good start, according to Nick Jurich, 202 Fiesta Drive, Pittsburgh, who reported an initial membership of 23. Persons in that area interested in the NHF health-related freedom-of-choice goals are invited to contact Mr. Jurich for information about membership, and meetings.

CCS Fifth Annual Convention Set for July

The Fifth Annual Convention of the Cancer Control Society is to be held the weekend of July 2, 3, 4, in the Ambassador Hotel, Los Angeles. For professionals, sessions are scheduled for Monday, the 5th.

According to Lorraine Rosenthal secretary-treasurer of CCS, the speakers' list includes Edward Carl, N.D., Port of Health, Ajijic Jalisco, Mexico; Biochemist E. T. Krebs, Jr., who with his father, the late E. T. Krebs, Sr., developed Laetrile; Ed Griffin, author of *World Without Cancer;* James Privitera, M.D.; John Richardson, M.D.; Virginia Livingston, M.D.; Betty Lee Morales, president of CCS; Clinton R. Miller, executive vice-president of the National Health Federation who will speak on "Bitter Is Better" (apricot kernel).

Several cancer patients also will be on the program, including Ray Mansell of Aliquippa, Pa., author of *Cancer Simplified;* Robert Strickle, a recovered melanoma patient who wrote *Conquest of Cancer;* Eydie Mae Hunsberger, author of *How I Conquered Cancer Naturally;* and others.

FOOD AND HEALTH FORUM JUNE 18-19

The second Consumer Forum on Food and Health sponsored by CAbol is to be held the weekend of June 18-19 in Ross Hume Hall, McMaster University, Hamilton, Ontario, Canada.

Among speakers and subjects are these: Beatrice Trum Hunter, food additives; William Lijinsky, Ph.D., director of the carcinogenesis program, Cancer Research Center, Frederick, Md. "Nitrites: A Problem, Not a Scare"; Stuart Hill, Ph.D., McGill University, ecological agriculture; Joe Collins, Ph.D., coauthor with Frances Moore Lappe of *Food First,* "The Myth of World Food Shortages"; Congressman Fred Richmond, "Soil Restoration May Require Legislation"; Ruth Desmond, president of Federation of Homemakers, "Educate Your Legislators — Be Involved — Communicate"; Ross Hume Hall, Ph.D., author of *Food for Nought, the Decline in Nutrition,* "Old Science Sells the New Foods"; Jerry Green, M.D., editor of the *The Critical List Magazine,* "Be Your Own Doctor Through Nutrition"; Lorne Nystrom, M.P., "Taking on the Food Giants." A film, "Bottle Babies," also will be shown.

NUTRITION EDUCATION GROUP JULY MEETING

The 10th annual meeting of the Society for Nutrition Education (SNE) will be held July 11-14 in the Shoreham-Americana Hotel, Washington, D.C., according to Helen D. Ullrich, executive director, 2140 Shattuck Ave., Suite 1110, Berkeley, Calif.

Theme of the sessions is "Challenge of Change," and the program will focus on extending nutrition education through family, school, and health-care facilities. "Top authorities" will present overviews on recent and future changes in these systems. The meeting is open to health professionals, paraprofessionals, and health and consumer science educators.

Irwin Stone Presents Impressive Evidence

The Scurvy/Cancer Syndrome and Vit. C

BY IRWIN STONE, Ph.D.

The possibility of a relationship between scurvy and cancer does not occur to most orthodox nutritionists and medical doctors, especially if they have not kept abreast of the biochemical, genetic, and clinical research on scurvy of the past decade. They have been so thoroughly indoctrinated with so many erroneous ideas and misconceptions about ascorbate, ascorbic acid, Vitamin C, and scurvy, that it is very difficult for them to understand the true situation, even if they want to.

If you should ask nutritionists, "what is scurvy?", they will promptly reply that "scurvy is a simple dietary disturbance caused by the lack of the micronutrient, Vitamin C, in the diet." They also will tell you that "Vitamin C is found in fresh foodstuffs, and if you get the recommended daily allowance of 45 mg a day everything will be fine, and you will not get scurvy." If they are true followers of the current propaganda line they will add "do not take more than about 100 mg a day of Vitamin C as it will do you no further good, and the excess will be completely wasted by excretion in the urine; besides being wasted, you will be excreting a most expensive urine." Not only that, but "larger intakes might even be dangerous to your health, making you more susceptible to heart attacks, increase your risk of developing kidney and bladder stones and blood clots, and many other dire consequences."

If you were to ask a physician a similar question, the reply in many cases will be the same, and he might add that scurvy is a very rare disease in this country and he hasn't seen a case in years, despite the fact a form of scurvy is our most widespread disease,[1] and nearly every sick patient who seeks treatment from this doctor is also suffering from a very severe case of chronic subclinical scurvy, in addition to the ailment that prompted the visit. Scurvy is regarded by the medical profession as a rare disease in this country because in medical training they have been taught to use the classical signs and symptoms of the disease for its diagnosis. These classical symptoms actually are the terminal signs of a genetic disturbance causing scurvy, and so by the time the doctor recognizes the disease it has already run its longtime course, and the patient will expire shortly unless heroic measures are taken quickly. Medical schools fail to teach doctors how to recognize the relatively asymptomatic early stages of this chronic genetic malady. Cancer also would be considered a rare disease if doctors were taught to recognize only terminal symptoms. Like cancer, the best time to treat scurvy is in its early stages and prevent its progression.

Both nutritionists and doctors subscribing to these orthodox views of scurvy could not see any suggestion of a possible link between scurvy and cancer. This is a prime reason this vital link was not detected and thoroughly explored 40 years ago when an abundant supply of ascorbate, for the first time, became technologically feasible and cheaply available. A solution to the cancer problem thus has been delayed for 40 years. For progress in the cancer problem, these orthodox attitudes and eighteenth-century thinking have to be replaced by the new genetic concepts on scurvy, resulting from the research of the past decade.

Let us now review results of this last decade of research on ascorbate and see what it actually reveals about the link between scurvy and cancer. This will show that more progress has been made in understanding the real nature of scurvy in the last 10 years than in the past 200 years. It also will reveal that many of our firm beliefs about this disease and Vitamin C are mostly half-truths and misleading misconceptions. The natural history and biochemistry of ascorbate during the course of evolution and the genetics of scurvy were reviewed in detail in the April 1974 issue of this journal.[2] That article can be consulted for items omitted in the following brief outline.

NEW INFORMATION

It was shown in 1966[3] that the 60-year-old Vitamin C-dietary deficiency disease theory was a very inadequate explanation of the basic cause of scurvy. True, it explained how the disease began in humans, but it didn't explain why it happens. Instead of a simple dietary disturbance,[4] as scurvy had for so long been regarded, research showed that the biochemical lesion of scurvy is the absence of the enzyme, L-gulonolactone oxidase, in the liver. Humans carry a defective gene for this enzyme. All of the human population is afflicted with this genetic defect, and thus suffer

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This article, entitled "Scurvy and The Cancer Problem," appeared in the September 1976 issue of American Laboratory, *Fairfield, Conn., and is reproduced with permission of the author and of Frederick I. Scott, Jr., editor, and International Scientific Communications, Inc. Irwin Stone, a retired biochemist, was one of the early workers on ascorbic acid, starting in 1934 with its chemical technology and later in its medical aspects and genetics. In 1966 he described the genetic liver-enzyme disease, hypoascorbemia, "the basic cause of scurvy, a disease much more prevalent in our population than formerly regarded." "Retirement" means he now spends full time researching the chronic subclinical scurvy syndrome (CSS) with the objective of solving some of our critical medical problems and providing a healthier, longer lifespan. Author of 90 published papers, two books, and holder of 26 patents, he lives with Mrs. Stone at 1331 Charmwood Square, San Jose, Calif. 95117. His book,* The Healing Factor, *is available at cost ($1.25) from Bronson Pharmaceuticals, 4526 Rinetti Lane, La Canada, Calif. 91011. Published by Grosset and Dunlap in 1973, the book deals with "almost every plague with which modern industrialized man is afflicted," from aging, allergies, arthritis and cancer, to colds, diabetes and low blood sugar, glaucoma and cataract, heart and circulatory disorders, kidney and bladder diseases, and mental illness.*

from a potentially fatal genetic liver enzyme disease — hypoascorbemia.[5] This defective human gene prevents us from producing our own ascorbate in our livers,[6] and thus deprives us of this important mammalian mechanism for fighting stress.[7]

Most other mammals have the intact gene for this liver enzyme, and thus are able to make their own ascorbate in the huge daily amounts necessary to fullfill high daily requirements. These amounts of ascorbate are of the order of many thousands of milligrams a day, based on the body weight of a human adult.[2]

These close relatives of ours — the other mammals — also have developed a further protective mechanism in that they are able to produce much more ascorbate in response to stress.[8] They have been producing these huge amounts of ascorbate each day for many millions of years without harm. These high daily amounts of ascorbate are in the exact range of what some worrisome befuddled orthodox workers are regarding as "dangerous" to humans, not realizing that these high amounts were not only necessary for the evolutionary survival of the mammals, but also essential for their present dominance of all corners of the earth.

SHORTENED LIFESPAN

The handicap of this defective gene has made the survival of the hominids and humans over the past several million years very precarious. Man has paid a terrific toll in death and suffering and a very short lifespan because of this genetic defect in the course of our prehistory and during recorded historic times. It is estimated that, with the intact gene, human adults would be producing 10,000 to 20,000 mg of ascorbate a day in our livers (the same as the other mammals), with a three-to fivefold increase under stress. Instead, for thousands of centuries, man has been fortunate to get a scant few milligrams of ascorbate with his food each day. We can state, without fear of contradiction, that, during prehistory and historic times, and for most people up to the present, humans, even in the best of times, have been forced to exist on below-subsistence rations of ascorbate throughout their lifespans. This brings on the chronic subclinical scurvy syndrome (CSS), which sets the stage for most of our current serious long-term medical problems, including cancer.

A 150-pound goat, approximately the size of a human adult, is capable normally of producing 13,300 mg of ascorbate in its liver to satisfy its daily needs for this vital substance. It is impossible for humans to ingest amounts of ascorbate of this magnitude solely from daily food. For instance, the potato, which for centuries has been relied upon to prevent scurvy, has only 15 mg of ascorbate per 100 grams of boiled potato. One would have to eat 195 pounds of potatoes each day merely to match what a healthy goat produces in its liver. We cannot fully correct for the bad effects of our defective gene by sole dependence on the ascorbate contained in our foods. Prior to about 40 years ago, food was our only source of ascorbate, so we could do little more with this genetic disease than prevent the appearance of its terminal symptoms. In the early 1930s our chemical technology caught up and taught us how to make ascorbate synthetically, plentifully, and cheaply, and thus finally offered a solution to serious medical problems that have plagued man and his primate ancestors for the past 60 million years. This was the greatest health accomplishment of the 20th century, and yet medicine, over the past 40 years, has been remiss in not making full use of the vast therapeutic potential of ascorbate.

In order to be in the same ballpark as the other mammals, an adult human would have to ingest 10,000 to 20,000 mg of ascorbate daily. If this is not done, then the CSS Syndrome rears its ugly head, and its severity depends upon how little ascorbate is ingested, and the extent and intensity of incident stresses.

SCURVY / CANCER LINK

Now let us see the scurvy connection with cancer. The early work on the use of ascorbate in cancer, going back to 1936, recently has been reviewed.[4] It indeed shows a definite connection between ascorbate and cancer, both in favorable clinical data and in the detoxication of carcinogenic materials. The main problem with these early workers was that they were so indoctrinated with the idea that they were trying to correct a simple trace dietary deficiency that they were unable to conceive of the size of dose necessary for effective therapeutics. They used milligrams a day, when many thousands are required. It is only in the last decade that the vital importance of relatively massive doses is being comprehended by clinical investigators.

Doses of 24,500 to 42,000 mg of ascorbic acid per day were first used in a case of myelogenous leukemia,[9] giving complete remission of the disease. This remission was due entirely to the ascorbic acid, because the doctor in charge stopped the intake of ascorbic acid by the patient twice, as an experiment. Each time the patient's temperature rose, he felt ill, and the leukemic symptoms returned. When ascorbic acid was resumed, the temperature returned to normal within six hours, the patient's wellbeing improved, and remission recurred. This case history was published in *Medical Times* in 1955, and one would think that someone in these many years would have tried this harmless therapy in the thousands of cases of leukemia that appear each year. A search of the medical literature has failed to reveal anyone publishing a check on these exciting clinical results.

In 1969, Dean Burk and his group at the National Cancer Institute published (in *Oncology*) a paper describing their findings that ascorbate would kill cancer cells and was harmless to normal cells.[10] The opening sentence reads, "The present study shows that ascorbate (Vitamin C) is highly toxic or lethal to Ehrlich ascites carcinoma cells in vitro." They wrote further, "The great advantage that ascorbates. . . possess as potential anticancer agents is that they are, like penicillin, remarkably nontoxic to normal body tissues, and may be administered to animals in extremely large doses (up to 5 or more g/kg) without notable harmful pharmacological effects." Remember that 5 grams of ascorbate per kilogram of body weight, for a 150-pound adult, amounts to 350 grams or 350,000 mg — more than three-quarters of a pound. They further state, "In our view, the future of effective cancer chemotherapy will not rest on the use of host-toxic compounds now so widely employed, but upon virtually host nontoxic compounds that are lethal to cancer cells of which ascorbate. . . represents an excellent prototype." In addition, they point out

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that ascorbate never was tested for its anticancer effects by the Cancer Chemotherapy National Service Center because it was too nontoxic to fit into their screening program. They don't want to test anything unless it helps kill the cancer patient.

NOT INTERESTED

A substance like ascorbate that will kill cancer cells and be harmless to normal cells has been a long-term goal of cancer researchers, and in 1969 it looked as if it had been achieved. One would expect that a crash research program would immediately be organized to check and extend these observations and obtain clinical data of this breakthrough. That was six years ago, and no further papers, published by the NCI, could be found on this important cancer observation on ascorbate. Apparently the work was stopped and dropped like a hot potato. If an intensive crash research program had been instituted in 1969, the cancer problem may have been solved by now, or at least we would know a lot more about the role of ascorbate in cancer.

Considerable taxpayers' money has been and is being poured into the National Cancer Institute and its parent organization, the National Institutes of Health. Clearly, some sort of investigation should be started, Congressional or otherwise, to get an explanation of why the NCI suddenly dropped this promising line of research. The taxpayers, especially the cancerous ones who have their lives on the line, are entitled to know, because one gets the ugly thought that maybe they are not interested in solving the cancer problem too quickly.

In 1974 the NCI published 994 scientific papers representing research projects on cancer financed by the Institute,[11] and not a single one was indexed as relating to ascorbate. The situation is even worse when the 3,242 publications of the results of medical research from the 18 divisions of the National Institutes of Health are considered, and again there is not a single one on ascorbate. The NIH is supposed to represent modern thinking in medicine.

ASCORBATE'S ROLE

In 1973 there appeared a very important paper on a new orthomolecular approach to cancer and other diseases by Ewan Cameron and Linus Pauling.[12] This paper brought up to date earlier work by Dr. Cameron, and showed that ascorbate was a good inhibitor of the enzyme hyaluronidase, the enzyme that liquefies and breaks down tissues, and ascorbate prevents this. All cells are normally imbedded in a thick viscous environment of ground substance, which restrains growth. For cells to grow and proliferate, they release hyaluronidase, which permits cells to divide, proliferate, and migrate. Proliferation continues as long as hyaluronidase is released, and stops when it is inhibited and the tissue environment is allowed to return to its normal restraining state. In other words — ascorbate has the potential of slowing down or stopping the growth of cancers. Quoting a few sentences from this paper, "The hypothesis also indicates a safe and elegant method of control in many inflammatory and auto-immune diseases where, although the individual causes are still unknown, the essential feature is always excessive cell proliferation. . . Most important of all, we are led to the conclusion that the administration of this harmless substance, ascorbic acid, might provide us with an effective means of permanently suppressing neoplastic cellular proliferation and invasiveness — in other words, an effective means of controlling cancer. Ascorbic acid in adequate doses might prove to be the ideal cytostatic agent. . . It is our hope that a thorough trial will be given this safe substance, ascorbic acid, which may turn out to be the most valuable of all substances in the armamentarium of orthomolecular medicine." "We conclude that ascorbic acid may have much greater therapeutic value than has been generally assigned to it."

Three further papers appeared in this series on the orthomolecular treatment of cancer; two in 1974[13] and one in 1975.[14] The first was a further discussion of the rationale for the megascorbic therapy of cancer. The second reported the clinical results of a pilot study of 50 advanced cancer patients receiving about 10,000 mg of ascorbate a day, either intravenously or orally. Their conclusions were: "Our clinical findings support the general contention that large doses of ascorbic acid enhance natural resistance to cancer. We have found this medication to have definite palliative value in management of terminal 'untreatable' human cancer. We would therefore expect it to have even greater value when used in treatment of earlier and more favorable patients. We believe that, in time, ascorbic acid supplementation will come to be accepted as a standard supportive measure in most, if not all forms of cancer treatment. We consider that large-scale clinical trials along such lines are now clearly indicated."

CASE HISTORY

The third paper is a case history of a "treatable" cancer in a 42-year-old long-haul truck driver. The diagnosis was malignant lymphoma, and arrangements were started to have him treated by orthodox irradiation and cytoxic chemotherapy. Because of an administrative delay in sending him to the appropriate facility and his rapid clinical deterioration, ascorbate was administered in the hope the malignant growth could be slowed until conventional treatment could be started. He was given 10,000 mg a day intravenously for the first 10 days, and 10,000 mg a day orally thereafter. The response to the I.V. ascorbate was so dramatic that the patient "claimed to feel quite fit and well and had been transformed from a 'dying' into a 'recovering' situation. Appetite had returned, night sweats had ceased, with a general sense of well-being." The enlarged liver and spleen had receded, and other symptoms of the disease rapidly subsided. The 10,000 mg of oral ascorbate were continued for five months, and during this time he remained well and in active employment. At this time, for some unknown reason, the oral ascorbate was stopped. A month later at a routine clinical examination, he was sick and complained of a recurrence of the symptoms. Clinical evidence of return of the disease was obtained. Ascorbic acid at 10,000 mg a day orally was again given, but without the previous dramatic response. Two weeks later the disease had so progressed that he was readmitted to the hospital and given 20,000 mg a day of ascorbate intravenously for two weeks, and 12,500 mg a day orally thereafter. A slow, sustained clinical improvement was shown, and examination about six months later showed him normal in all respects. "The patient remains fit and well, is in active heavy employ-

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ment, continues to take 12,500 milligrams of ascorbic acid a day, and has no evidence of active disease."

This case was described in detail because of the similarities of response to stopping the daily intake of ascorbate as in the case of myelogenous leukemia cited previously. In both patients, the cancerous disease was in a state of remission during the large daily intakes of ascorbate, and the disease returned as soon as the daily intake of ascorbate ceased. Control of the disease again occurred when ascorbate was restarted. In the truck driver's case, the response was not so dramatic on reinstituting the ascorbate as in the leukemia case. It is likely this was because the truck driver was getting much less ascorbate than the leukemic — 12,500 mg for the truck driver as compared with 24,500 to 42,000 mg a day in the leukemic.

MORE EFFECTIVE

A dose of 12,500 mg of ascorbate a day is in the lower fringes of therapeutic effectiveness for a disease as serious and stressful as cancer. Daily intakes of ascorbate of at least about 50,000 mg a day will give a more effective therapeutic response, as indicated not only by this leukemia case, but also by unpublished clinical data of Saccoman, discussed later. Doses of this order of magnitude can be given without fear of toxic responses. Klenner[15] uses up to 300,000 mg of sodium ascorbate intravenously each day in his successful therapy of viral diseases.

Cameron and Baird, in 1973,[16] published the important observation that intravenous megadoses of sodium ascorbate will relieve pain in terminal cancer patients. Five patients on a heavy morphine schedule to control pain were able to discontinue the morphine entirely within a few days after the 10,000 mg of sodium ascorbate injections were started. A similar pain-killing effect was noted many years ago by Klenner in his megascorbic therapy of severe burns and snakebite. No withdrawal symptoms occurred in Cameron and Baird's patients when the morphine was stopped. This would suggest that megadoses of sodium ascorbate might be useful in the control of drug-abuse, and the salvage of addicts.

The most recent published evidence of the effectiveness of ascorbate appeared in the November 1975 issue of *Surgery* on the use of oral ascorbic acid in regressing rectal

HIS DAILY REGIMEN

In what he calls his "daily megascorbic regimen" for maintaining "vibrant health and long life," Mr. Stone says he takes between 10 and 20 grams of ascorbate every day, and in addition uses: Vitamin A — 20,000 I.U.; Vitamins B^1, B^2 and B^6 — 50 mg each; Vitamin B^{12} — 100 micrograms (mcg); Vitamin E — 800 I.U.; niacinamide — 1,300 mg; pantothenic acid — 100 mg; folic acid and biotin — 100 mcg each; calcium — 375 mg; magnesium — 150 mg; zinc — 15 mg. This is for "a healthy person." In cases of severe disorder — as in cancer, ulcerated breast — he recommends — depending on condition and patient — 50 grams per day, more if it can be tolerated (just below the onset of diarrhea), divided 10 grams of ascorbate acid, 40 grams of sodium ascorbate.

polyps.[17] Only 3,000 mg of ascorbic acid as a time-release preparation were given each day. In spite of this low dosage, the authors state, "Ascorbic acid reduced the number of rectal polyps in five of eight patients, and a major reduction of polyps in three others." "We attribute this effect to ascorbic acid. These results suggest that some neoplastic lesions of the colon may be reversible by pharmacological measures." Although their clinical results with 3,000 mg were mostly good, there were three patients whose polyps were unaffected by the treatment. These unresponding patients would probably benefit and show polyp regression if the daily ascorbate intake were increased to a level that we now know to be required for dramatic clinical effects. In this particular condition, further benefits might occur through the use of 3% sodium ascorbate enemas, in addition to the oral intake.

In addition to the aforementioned published data on ascorbate and cancer, some unpublished work is being conducted which will be briefly mentioned. Livingston and her group in San Diego[18] are using 10 to 50 grams a day of ascorbate in conjunction with other cancer modalities with very exciting clinical responses. Saccoman[19] has been interested in megascorbic therapy for many years, and in fact independently observed some years ago, the pain-killing and morphine-substituting effects of intravenous sodium ascorbate in terminal cancer, reported in 1973.[16]

SACCOMAN'S WORK

From his wide clinical experience, Dr. William J. Saccoman of San Diego has evolved this general procedure: patients are started with 22,500 mg of intravenous sodium ascorbate daily. They also take oral ascorbic acid and sodium ascorbate to a total of 50 grams ascorbate a day, or until diarrhea results. The diarrhea clears in a few days, if present, and oral intake is increased gradually along with a decrease in intravenous administration. The total daily dosage is kept at 50 grams a day of ascorbate until the patient is entirely upon oral administration. The first noticable effect is an almost immediate improvement in the patient's wellbeing. The following are a couple of case histories, typical of the clinical data being obtained:

1. An adult male had bladder cancer which metastasized to the spine at the level of the tenth thoracic vertebra. Surgical removal of this spinal cancer left the patient completely paraplegic. He was put on 50,000 mg of ascorbate, and to quote the doctor, "he is now coming along beautifully." There has been a return of bladder and bowel function and the patient ie able to walk with braces. The cancers are under control, and dormant. During the day, the patient takes the powdered ascorbic acid and sodium ascorbate, and at bedtime takes eight timed-release ascorbic acid tablets.

2. An adult woman was diagnosed as having carcinoma of the lung which had metastasized to the thoracic duct. This caused so much fluid to collect in the chest cavity as to interfere with breathing, requiring 11 fluid drainages of the chest cavity. This cancerous invasion also caused giant ascites in the abdomen, so big as to cause an umbilical hernia requiring surgical repair. Three years ago she was put on ascorbate, about 50,000 mg a day, and has been taking it ever since. The fluid in the lung and the ascites cleared and there are no longer any signs of these. Although the lung

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tumor is still present and visible in X-rays, it is starting to calcify, and there are no signs of active disease.

The simple lesson of the work of Saccoman and the other investigators using these huge daily intakes of ascorbate is that the stresses of cancer increase the body's need for ascorbate to such an extent that these huge daily amounts are required merely to satisfy these vital needs. The body has great recuperative powers, and if these daily needs are not adequately filled, handicapping of the body's natural ability to resist and fight off the disease and heal itself results. Surgery, radiation, and chemotherapy only further increase the needs and requirements for more ascorbate. The first step in any therapy should be to give and supply enough daily ascorbate to aid the body to combat and overcome these stresses. This is the simple lesson that orthodox medicine must learn before success in cancer therapy will be achieved.

A CANCER-FREE WORLD

When this lesson is learned, a cancer-free world is not a weird unrealistic dream, but a definite possibility. The speed at which we produce such a world will be measured by the rate at which the decision-makers at the National Cancer Institute, the American Cancer Society and the medical profession learn this lesson and are able to overcome their unreasonable bias toward megascorbics, evaluate fairly the wealth of clinical data and theoretical considerations now available, and conduct the necessary large-scale clinical testing programs required to demonstrate further the effectiveness of megascorbics in cancer.

In the author's opinion, the cancer problem essentially has been solved, and all that is needed now is routine large-scale tests to verify this conclusion. If these large-scale clinical tests were started immediately, we would be well on our way to having a cancer-free world in the 1980s.

POTASSIUM SOURCE

Mr. Stone says "most people suffer from a potassium deficiency," and he recommends as "the cheapest way to correct it," *Morton's Lite Salt,* a 50-50 mixture of sodium chloride and potassium chloride. "It is a good product, available at the supermarket," he said, "and few people know about it."

NATUROPATHS WIN INITIAL ROUND

The first hurdle in the court battle to legitimatize naturopathy throughout the United States was cleared by the National Association of Naturopathic Physicians when a seven-judge federal panel in Miami, Fla., in late January refused to dismiss the case and ordered the 30 defendant states to agree on a location for trial.

According to Ronald R. Hoye, Sr., president of NANP, Attorney Stanley D. Crow of Boise, Idaho, presented the case of the naturopaths, after which attorneys for the defendant states moved for dismissal. This the panel refused to grant, advising them instead to reach a consensus as to a central location for the trial.

Guilty Verdict in 3-Month Laetrile Trial

Smuggling Conspiracy Charges To Be Appealed, Says Bradford

A federal court jury in San Diego in mid-April found the first four of 16 defendants guilty of conspiracy to smuggle Laetrile, and sentencing was set for May 16 by Judge William Enright. The four Californians are Dr. John A. Richardson of Albany; Robert W. Bradford of Los Altos, president of the Committee for Freedom of Choice in Cancer Therapy; Frank Salaman, vice-president of the Committee; and Ralph Bowman, business manager of the Richardson clinic.

The case will be appealed, according to Mr. Bradford, who thanked the jurors for their "attentiveness" during the trial, and said he was sorry they had to be away from their families for such a length of time. He was disappointed in the verdict, he said, but it was "God's will." (One of the female jurors left the courtroom crying, according to the San Diego *Evening Tribune*).

All the defendants during the trial said there was no constitutional law prohibiting importation of Laetrile into the U.S. Dr. Richardson termed "ridiculous" the prosecution's claim that he smuggled and distributed Laetrile for the profits, he said he acted as he did on "humanitarian grounds."

Prosecuting Attorney Herbert Hoffman praised the defendants for conducting themselves "in an exemplary manner" during the trial. Mr. Bradford was assisted by Attorney David Gill who acted as cocounsel, but the other defendants did not retain an attorney to handle their defense.

Despite the verdict, said Mr. Bradford, "We're going to continue to carry the fight to state legislatures for freedom of choice in cancer therapy, as we appeal our case on constitutional issues." More than 800 prosecution and defense exhibits were introduced, and the transcript of testimony approximated 6,000 pages.

Jurors heard testimony that Laetrile is effective in treatment and control of cancer in metabolic therapy, but no guarantee of a cure was suggested by the defendants. The court had ruled out evidence or testimony by the defense in support of their contention Laetrile is effective as cancer therapy, but patients called by the defense slipped in such testimony from time to time before the judge could stop it.

Nor was the defense permitted to exhibit a film, "World Without Cancer," because it touches on the efficacy of Laetrille. However the defense was permitted to describe aims and objectives of the Committee in conducting workshops for doctors and seminars for laypersons interested in learning more about the use of Laetrile in treatment of degenerative diseases, including cancer.

The prosecution's case was supported primarily by circumstantial evidence, U.S. Attorney Hoffman acknowledged. He produced evidence to support his belief that profits exceeding $2½ million accrued to Dr. Richardson, and that profits in excess of $1.3 million went to Mr. Bradford during the period of the alleged conspiracy.

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Washington B-17 Bill Passes First Hurdle

The Washington State Senate in April passed 36-9 a bill to remove the threat of sanctions against physicians who prescribe Laetrile (B-17) for cancer treatment, and hospitals where it is used. Senator William S. Day, who led support for the bill, said Laetrile should be part of "a patient's freedom of choice." He said that although the substance is not illegal in Washington, there has been a threat of action against physicians and hospitals using it. Interstate shipment is banned by FDA.

The senator said FDA considers Laetrile "a harmless spice." When Senator Nancy Buffington said FDA judgment "should be respected," he replied, "FDA is the same force that has been a deterrent to medical freedom for all time."

Senator Day is a chiropractor whose brother has cancer and has been on Laetrile two years. As chairman of the Senate Committee on Social and Health Services, he was able to get the bill through his committee by a vote of 7-6. After it reached the floor, it was "easy sailing." The medical profession and American Cancer Society opposed the measure, describing Laetrile as a "cruel hoax."

During debate on the floor, Senator Lorraine Wojahn said, "I wish to God we could have tried Laetrile. Our son had lung surgery, then cobalt, then chemotherapy. The treatment was nauseating and sickening. Then we went back to cobalt treatment. It was searing, burning. If Laetrile had been available, we would have tried it. He went from 180 pounds to 110 pounds in three months. After years of agony, came death."

Although the defendants did not admit the smuggling conspiracy charge, part of their defense was an attack on the Food and Drug Administration which declared Laetrile a "new drug" without holding necessary administrative procedural hearings required by law. Because of that oversight, an FDA memorandum proscribing importation of Laetrile was not legal and was merely an administrative fiat in violation of the constitution, they maintained.

The government used admitted Laetrile smugglers as witnesses, and Attorney Gill described those witnesses as "perjurors who testified for the government to save themselves from prosecution." Never, he said, had he seen a case supported by "so many criminals."

The defense sought to show that the government in pressing smuggling conspiracy charges was, in effect, exercising its power to deny doctors and patients the right to freedom of choice in choosing the kind of therapy they wanted to treat cancer.

The government is preparing to prosecute others listed in the indictment returned in 1976. Scheduled for trial in May on conspiracy charges are Andrew R. L. McNaughton; Guido Orlandi, Sr., Burlington, Vt.; Frank Spolnick of Hammond, Ind., and Gustavo Del Rio, part-owner of Cyto Pharma in Tijuana.

BACK ISSUES

The Federation has accumulated back issues of *The Bulletin*. To clear the warehouse, bundles of 20 assorted past issues (NHF assortment 1969-1975), are available at $2. Order from NHF, Box 688, Monrovia, Ca. 91016.

THIS IS THE NATIONAL HEALTH FEDERATION

The National Health Federation is America's largest, organized, noncommercial health consumer group. It is a nonprofit corporation founded in 1955. Its membership is comprised of men and women in all walks of life, belonging to a variety of religious faiths and political persuasions, and engaged in nearly every profession and trade.

Its members believe that health freedoms are inherently guaranteed to us as human beings, and our right to them as Americans is implied in the words, "life, liberty and the pursuit of happiness." Yet, frequently, these freedoms and rights have been and continue to be violated. Too often, as a result of the unopposed pressures from organized medicine, the chemical industry, pharmaceutical manufacturers, and others, laws and regulations have been imposed which better serve these special-interest groups than the public at large. We see and hear of new instances daily. To name a few: spiraling health-care costs, consumer exploitation by leading industries, excessive devitalization and adulteration of our foods, restriction of certain types of treatment, banning of certain health books from the mails, the harassment of those who advocate natural methods of healing and natural foods, the poisoning of our air, water and soil through greed and carelessness, and many other health-related issues.

The NHF opposes monopoly and compulsion in things related to health where the safety and welfare of others are not concerned. NHF does not oppose nor approve any specific healing profession or their methods, but it does oppose the efforts of one group to restrict the freedom of practice of qualified members of another profession, thus attempting to create a monopoly.

The public needs a strong voice, such as the NHF provides, to speak and act in their behalf in these health-related matters. Legislators need your support to balance the pressures exerted upon them by the special interests. The National Health Federation, through a special legal and legislative staff in Washington, keeps its members apprised of all health legislation, opposes inadequate or undemocratic health legislation, while supporting or drafting bills to protect the individual's health freedom.

Will you join us in this worthy effort?

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Every family in America should belong to the National Health Federation to —

1. Support the principle of freedom of choice and liberty in health matters.
2. Be a part of a strong and united consumer's voice in all health matters.
3. Work for beneficial and needed health legislation and, at the same time, oppose proposals which are detrimental to the health interests of the people or which do not provide for equality of recognition of all legally established health professions.
4. Support a united effort to reduce the cost of health care.
5. Oppose insults upon our ecology which have an impact on health
6. Oppose the use of chemical food additives which have not been proved absolutely safe or which are not needed.
7. Secure fair and impartial enforcement of food and drug laws and regulations.
8. Insist that all monies raised for health research and care be used exclusively for these purposes.
9. Compel all health fund-raising organizations to disclose in an annual report, the amount of funds collected and how the funds were expended.

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Northern California — June 25-26
Airport Marina Hotel — Burlingame

Northwest Regional — July 9-10
Sheraton-Portland — Portland

Midwest Regional — Sept. 10-11
Holiday Inn — O'Hare Kennedy
Rosemont (Chicago)

Southeast Regional — Oct. 8-9
St. Petersburg (Fla.) Hilton Hotel

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