

ISSUES

Harvard's Sugar-Pushing Nutritionist

By John L. Hess

HARVARD'S famed nutritionist, Dr. Fredrick J. Stare, preaches that sugar is not fattening and that Americans could use three times as much of it without harm. He himself, though, takes his coffee and his cereal unsweetened by sugar or saccharin. A trim figure of a man, looking far younger than his sixty-eight years, he confides that he avoids those sweet calories "so I can enjoy a martini at night."

Dr. Stare's dietary habits are of interest because he is beyond doubt the country's most influential teacher of nutrition. He founded the department of nutrition at Harvard's School of Public Health; he advises the government and the food industry; he is coauthor of a sumptuous manual on nutrition that is distributed free to medical students by the Upjohn Company; and he is coauthor of a best-selling textbook on the subject for undergraduates studying to become home economists, dietitians, or teachers.

He reaches the general public directly through a syndicated radio program, a syndicated newspaper column, and a series of popular books. All feature, in addition to standard nutritional advice, the special Stare message, as carried on the jacket of his widely read book *Panic in the Pantry*: "Eat your additives; they're good for you."

The fact that every physician, nutritionist, dietitian, and home economist in the country has received the reassuring Stare message goes far to explain why it took a decade of bitter controversy to ban DDT, why efforts to control the consumption of sugar have failed, and why the proposal to ban saccharin set off a counterrevolution against food-and-drug legislation.

In all these disputes, Dr. Stare has played a Panglossian role by maintaining that DDT is harmless, sugar is good for you, and saccharin is sheer pleasure and won't hurt you. He was born for such a role. With his iron-gray hair parted just off center, his eyes twinkling behind pale shell glasses, he invites trust, like the family physician on a Norman Rockwell magazine cover. This benevolent effect is heightened by the old-fashioned doctor's black bag that Stare often carries.

Sitting and chatting with Dr. Stare, as I did recently, one gets little sense of his having been a stormy figure in the

controversies that have racked the worlds of nutrition and environmentalism for the past generation. Yet he was a major protagonist in those controversies and is helping to shape those that are to come.

It is no exaggeration to call these life-and-death issues. So it seemed important to me to learn who Fred Stare is, and what makes him tick.

Fredrick John Stare was born in Columbus, Wisconsin, in 1910; won three degrees at the University of Wisconsin; and received his M.D. from the University of Chicago, in 1941. The following year, he went to Harvard as its first teacher of nutrition. That same year, the food industry set up an educational arm called Nutrition Foundation, which engaged him to publish, at Harvard, a scholarly digest called *Nutrition Reviews*, which he was to edit for the next 25 years.

At about that time, British scientists discovered that Agene, then used to bleach flour, caused dogs to die of convulsions. And concern grew regarding other additives and traces of pesticides and antibiotics that were turning up in bread, milk, ice cream, and other foods.

The nutrition department at Harvard never actually engaged in research to determine the safety of foods being eaten by healthy people; its concern was primarily with diets for the sick. But Dr. Stare and like-minded authorities did not ignore the public's alarm. In 1950 they established the Food Protection Committee (FPC) of the National Research Council and the National Academy of Sciences with grants from the food industry and the government. The committee's first report clearly foreshadowed the FPC's role in the years ahead: The report assured the country that DDT and other pesticides were quite safe.

Not sufficiently reassured, consumers in 1958 obtained the passage of the Delaney Amendment, which explicitly bars from use in processed foods any additive found to cause cancer. This, in the face of objections by such spokesmen as Dr. William Darby—an officer, with Stare, of the FPC and president of the Nutrition Foundation—who argued that some carcinogens were "essential to life" in small quantities.

The debate came to a climax with the

publication in 1962 of Rachel Carson's *Silent Spring*, a shattering account of the ravages DDT had inflicted on nature. Dr. Darby accused Carson of "ignorance or bias," and Dr. Stare declared confidently in *The New York Times Magazine*: "There has never been one medically documented death due to proper use of insecticides."

A powerful ally of theirs in the struggle that followed was Dr. Emil M. Mrak, a food chemist who was then chancellor of the University of California at Davis, a government adviser, a trustee of the Nutrition Foundation, and a director of the California Cannery and Growers and of Libby, McNeill & Libby. It was Dr. Mrak's sad task in 1969 to head the official commission that was forced by rebellious scientists to find that some pesticides are indeed toxic and that DDT is indeed carcinogenic and should be banned from all but "essential" uses.

(Rachel Carson died in 1964 and so never lived to witness her "official" vindication. Dr. Darby, who was vice-chairman of the Mrak commission, and Dr. Stare say they still believe she was wrong.)

While Drs. Darby and Mrak were defending food technology in Washington, Dr. Stare was waging the fight on the propaganda front. In such periodicals as *Reader's Digest*, *McCall's*, and *The New York Times Magazine*, he assured millions on his authority as a Harvard scientist that enriched white bread is as good as whole wheat.

Dr. Stare's certitude in these matters is remarkable in light of the rather plastic state of the art. Dr. Joan Gussow, who heads the nutrition program at Columbia's Teachers College, has observed:

"Every therapeutic diet that was in vogue when I did my graduate studies in 1969 and 1970 has been overthrown. They said pregnant women shouldn't gain weight; now a gain of twenty to thirty-five pounds is held normal. They put diabetics on high protein—that is, high fat—and now it's carbohydrates. [Patients with] ulcers got the Sippi diet of milk and cream all day; that was found to stir the stomach juices, so now [ulcer patients are] on three meals and antacid. Colitis patients got a soft, bland diet; now it's high fiber.... And all this in the last decade."

Even *Nutrition Reviews* now fre-

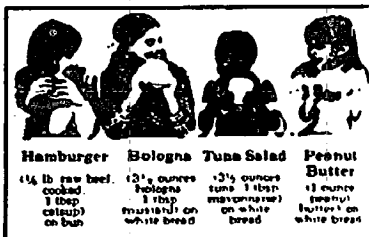
Consumer Reports thinks you should know:

How good is the bologna in that sandwich?

Of the 35 brands and varieties of bologna tested by *Consumer Reports* for quality, *nine* were rated Poor or Very Poor for taste. The samples, bought in food stores, were either rancid or showed beginning signs of rancidity.

The start of rancidity can often be detected by a perfume-like scent. So the sweet smell of your bologna may be trying to tell you something.

How does the bologna sandwich compare with the others?



The bologna sandwich earned our lowest vote of confidence.

Consumer Reports explored this in detail in its article "How Good is the Bologna in that Sandwich?"

Here's how bologna stacked up against the other three sandwich foods... (1) Highest in cost-per-ounce of protein (2) Highest in fats and calories. The bologna sandwich, in fact, was over four times as expensive as the cheapest sandwich—peanut butter—at the prices prevailing when we made our test. What's more, bologna contains a potentially harmful additive called sodium nitrite.

Consumer Reports gives you the facts behind the "baloney".

Today's supermarket is no place to be on your own.

Without help, it's hard to know about subtle product differences that can cheat your family of nutrients and may even cost you more in the bargain.

That's why *Consumer Reports* rates food and household products by testing standards just as rigorous as those we use for automobiles and expensive appliances. Equally rigorous standards are applied to our research into services, such as banking, insurance and much more.

Consumer Reports is the nonprofit, reader-supported magazine of Consumers Union—the nation's leading independent organization for testing and rating consumer products and services.



We don't accept advertising from anyone.

We buy what we test at the same stores you do. And we never accept "free samples" from manufacturers.

Five facts our readers learned that you could have used:

1. Shake 'n Bake Barbeque Chicken Coating is 50.9% sugar—more than five times the percentage of sugar found in Coca-Cola.
2. Hitachi, MGA and Sony proved the most reliable 19" color TV sets in our exclusive reader survey. The least reliable? Magnavox.
3. We showed how to determine the dealer costs on 94 cars ranging from the Chevrolet Chevette to the Cadillac Seville to help you strike the best deal.
4. Two banks can advertise the same interest rate for your savings account.

But one pays only \$44.93 for the same period for which the other pays \$75.30. It's how they *calculate* your interest that counts.

5. Yogurt costs 26¢ to 42¢ for an eight-ounce container, but for the nutritional benefits it provides, yogurt is a very expensive glass of milk.

A lot of companies may not like what we have to say.

But remember, those same companies spend millions of dollars a year on ads and TV commercials for their products and services...so they can give you the facts that serve *their* interests.

Shouldn't you spend just \$11 a year on *Consumer Reports*—so you can get the facts that serve *your* interests?

Subscribe now and get The Medicine Show and the 1978 Buying Guide Issue free.

New subscribers will receive a free copy of our 1978 Buying Guide Issue, 432 pages covering more than 1900 products by brand name and model number. You will also get, free, a copy of our revealing book about health products and services. *The Medicine Show*. And that's not all—see details of money-saving offer. Then mail coupon.



Here's how you save \$9.50 on this introductory offer to new subscribers

You get 11 regular monthly issues of *Consumer Reports* (newsstand price, \$1 each), total newsstand price \$11.00

You get the 1978 Buying Guide Issue, single-copy price \$ 3.00

You get the 1979 Buying Guide Issue, single-copy price... \$ 3.00

You get the 384-page guide to health problems and products *The Medicine Show*, price \$ 3.50

Total Price \$20.50

You Pay Only \$11.00

You save \$9.50

CONSUMERS UNION

publisher of *Consumer Reports*
Orangeburg, New York 10962

Please send free copies of the 1978 *Consumer Reports* Buying Guide Issue, and the 384-page guide, *The Medicine Show*. Enter my subscription to *Consumer Reports* for a year at \$11.00, including the 1979 Buying Guide Issue when published.

Payment enclosed Bill me, please

Name _____

Address _____ Apt. No. _____

City _____

State _____ Zip _____

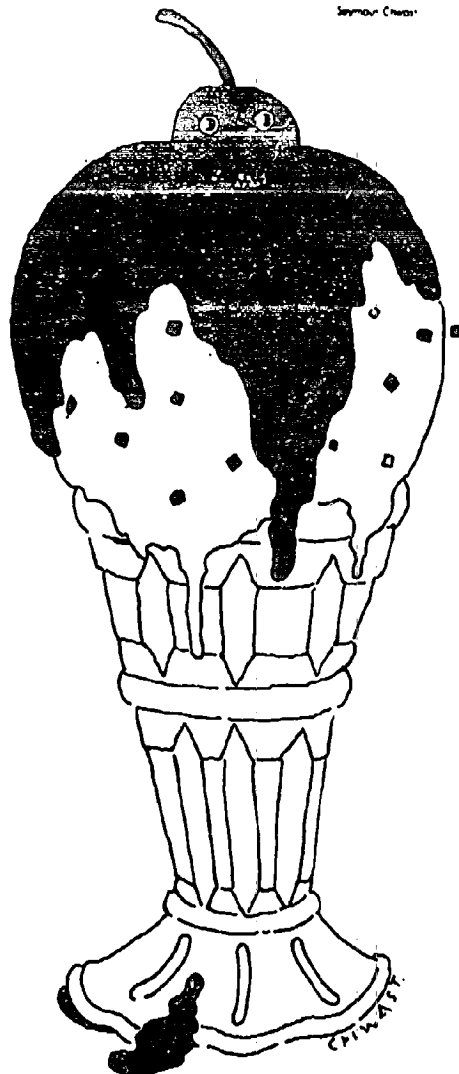
Save more. Check if you prefer: 18-11

2 years—\$20 (save \$14.50)

3 years—\$27 (save \$21.50)

Please allow 3-6 weeks for delivery. Refund of unused portion of subscription guaranteed if you wish to cancel for any reason.

© 1978 CONSUMERS UNION OF U.S.A., INC.



quently warns how little is known about nutrition. An editorial not long ago commented indirectly—and perhaps inadvertently—on Stare's downgrading of whole wheat by citing an experiment concerning the common food infection salmonellosis. "Animals fed a 'purified diet' presumably adequate in known nutrients died, while animals fed a crude diet of whole wheat survived," *Nutrition Reviews* reported. Stare's reaction to this revelation is not known.

Such pro-whole wheat critics as Dr. Gussow and Dr. Michael Jacobson—of the Center for Science in the Public Interest—point out that at least 20 known nutrients are milled out of wheat; the

industry puts back only four in "enriched" flour.

WHAT WORRIES Stare's critics is that in America today, the consumption of unprocessed foods is declining rapidly. Replacing the old diet of three square meals a day is a new kind of diet made up of what Dr. Stare once approvingly called scientific snacks—enriched tidbits designed for munching, sandwiches, prepared foods, fast foods, soft drinks. The new diet is low in roughage, which is now known to be an essential protection against certain degenerative diseases, and it is high in calories, especially sugar.

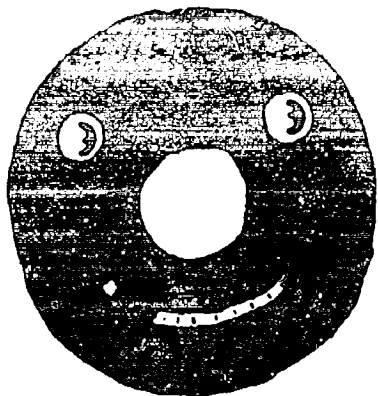
The food industry dotes on sugar because it is a cheap substitute for the flavors lost in processing and storage and because it is addictive. Suggestions that it may be directly responsible for a variety of ailments have apparently not been proved scientifically—at least not yet. But responsible nutritionists point out that sugar contains only "hollow calories," which replace valuable nutrients in the diet. Critics charge that its use in baby foods, soft drinks, candy, munchies, catsup, salad dressings, and a variety of other foods has promoted an epidemic of obesity—which in turn has incited the dieting hysteria that they and Dr. Stare decry.

The new diet pattern has also provided a great marketing opportunity. The 1960s saw an explosion in sales of artificial sweeteners. But as Dr. Gussow observes, the consumption of sugar did not decline. Indeed, most consumers (unlike Dr. Stare, who defends synthetic sweeteners but doesn't use them) regard a Sweet 'N Low or a diet drink as a license to eat a candy bar or dessert.

Another controversy having Stare at its center flared in 1969. When the sweeteners called cyclamates were found to be carcinogenic and were banned, the food industry hastily switched to saccharin. This sweetener was legal only because government advisers—led by Drs. Mrak and Darby and supported in the press by Dr. Stare—had for more than 20 years attacked as inconclusive tests indicating that saccharin should be withheld from the public. Stare, Mrak, and Darby suggested that the experimenters had used saccharin that was tainted with other substances, including cyclamates.

As a result, a new study using purified saccharin was ordered in Canada. When it confirmed the previous results, the Food and Drug Administration (FDA) reluctantly moved to ban saccharin. This decision set off an uproar—whipped up by the soft drink and saccharin industries through a lobby called the Calorie Control Council—and Congress suspended the ban pending further action in 1979.

Stare is also enthusiastic about another ingredient in our bottled pop. Many nutritionists are worried about the huge amounts of phosphates being imbibed by adolescents with their soft drinks. Among the viewers with alarm is Dr. D. M. Hegsted, successor to Dr. Stare as editor of *Nutrition Reviews*. Dr. Stare disagrees with Dr. Hegsted. In one of his newspaper columns, he wrote: "Does it surprise you to learn that cola is a good source of phos-



phorus? It is."

Stare's close associate and coauthor, Dr. Elizabeth M. Whelan, addressed a meeting of the National Soft Drink Association last fall. She urged the industry to promote its products not so much for being safe as for being enjoyable, adding that junk food might better be called fun food.

"The availability of something like soft drinks to children does not pose any known health hazard that would harm them," she assured the bottlers. She encouraged the producers of fun food to continue such promotions as General Foods' payment of five cents to school funds for every Kool-Aid or Post cereal label brought in by the kiddies. "A school is supposed to be an educational institution," she said, "and maybe a child should learn how to use soft drinks in moderation in this environment."

The Stare school of pro-additive polemicists uses a tactic that the French call *amalgam*—lumping together for purposes of ridicule all critics, from the frauds and crackpots to the most serious scientists and consumerists. Thus an article from an American Medical Association publication, reprinted in a special issue of *Nutrition Reviews* on misinformation and faddism, begins: "Adelle Davis. Ralph Nader. Carlton Fredricks. Sometimes those insistent public voices can make a food shopping list sound almost like a death wish."

The message is that all is safe in our larders and on the supermarket shelves and that anybody who says otherwise is a quack or worse.

This is the thrust of Stare's book *Panic in the Pantry*, which appeared in 1975 and has gone into four printings. It has now been issued in paperback, with no correction of any of the factual errors and distortions noted by such critics as Manon Burros of *The Washington Post*. Among the errors: that all

"A lot of the public, and unfortunately some of my colleagues, think I'm a monster—a paid tool of the food industry," says Fred Stare, amiably

chemicals now in use have "survived rigid testing"; that the FDA gave "a clear bill of health to red dye No. 2" (which has since been banned); that artificial colorings have been cleared of the charge of causing hyperactivity in children; that the cattle-feed supplement DES is harmless; that there is a safe threshold for the ingestion of carcinogens; that the only type of cancer that has increased in frequency in recent years is lung cancer.

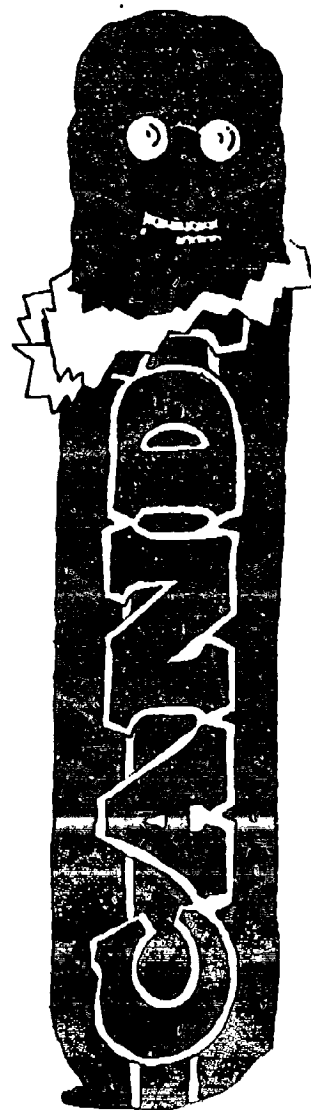
As Burros pointed out, cancers of the colon, the rectum, the pancreas, and the esophagus have all increased. Dr. Stare replied to the *Post* that he had written about cancer *deaths*, not incidence. The text of *Panic in the Pantry* does not bear him out. What it does demonstrate is his low opinion of scientists who question the safety of industrial products.

Dr. Darby accuses these scientist-critics of "scientific McCarthyism." Dr. Stare questions their competence on human health. In that context, he amiably calls the eminent Dr. George Briggs a "chicken nutritionist" and his own colleague Dr. Hegsted a "rat nutritionist" because they do experiments using these subjects. In *Panic*, it is averred that the public's right to eat synthetic sweeteners was decided by the results of tests on "four unfortunate rodents." (In interviews, Dr. Darby told me it was two or three rats and Dr. Stare said six or seven—but no matter.) Animal tests that implicate natural substances (aflatoxins, bracken, sassafras) as cancer causers are accepted however by Darby and Stare as conclusive.

Panic also puts down Dr. Jacqueline Verrett—the FDA researcher who blew the whistle on red dye No. 2 and on the FDA's suppression of antidye data—as the sort of person who keeps deformed chicks in jars in her laboratory. Linus Pauling is more kindly described as "one of only a few individuals twice honored with the Nobel Prize." (He is, in fact, the *only* one so honored, unless you count Marie Curie, who won one Nobel and shared another.)

Not surprisingly, Dr. Pauling now receives the Stare dunce cap because he advocates vitamin C for the prevention and cure of colds. One does not have to accept Pauling's thesis to be troubled by the response of Stare and the health establishment to the Nobel's findings. Neither does one need to accept

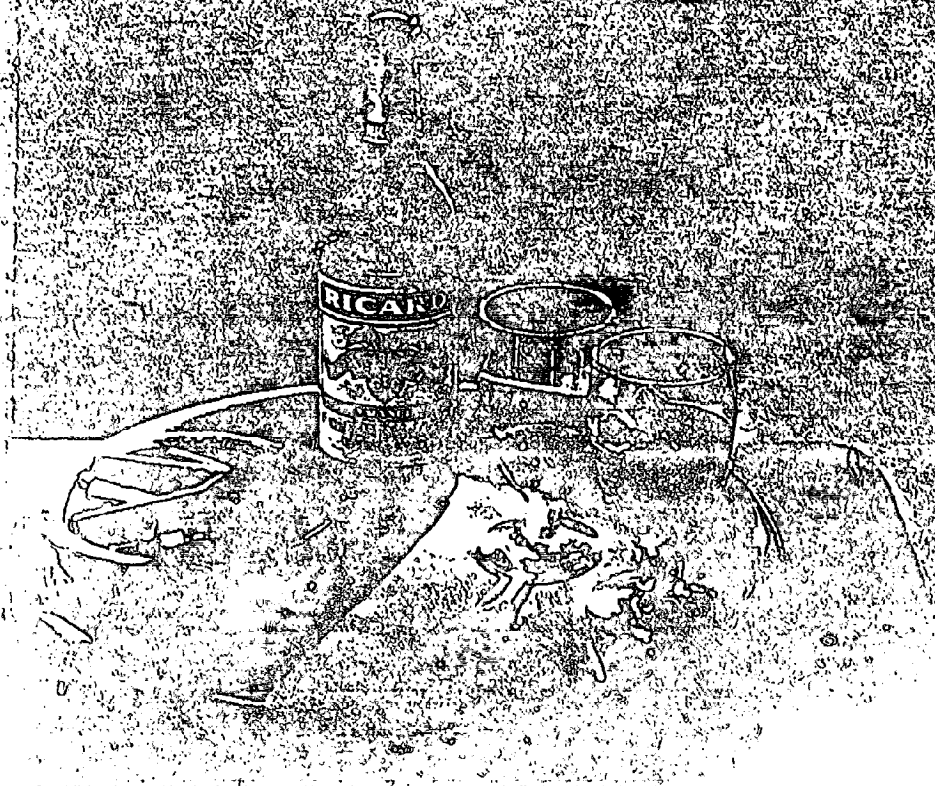
Pauling's suggestion that the large investment in proprietary cold remedy is a factor in the resistance to claim made for vitamin C. It is more plausible perhaps to suppose that some authorities just don't like outsiders say they are wrong.



RICARD

France's favorite bedtime snack

In France, where love is a national pastime, 60,000,000 bottles of Ricard are consumed yearly. Merely a coincidence? You will never know until you try Ricard yourself. This deeply mysterious, herb-flavored liqueur refreshes—stimulates the palate. Stir one part Ricard with five parts ice water. And find out why the French have known for years.



The cash register of Nettie's speaks to the computers of Needham



(Freda Klein is Vice President of Nettie's Flower Garden, a florist.)

"Contrary to popular belief, life in the flower business is no bed of roses.

"It's a jungle out there.

"And although, as Vice-President of the largest flower business in St. Louis, I'm an expert on the likes of Flondian gladioli, Dutch parrot tulips and South American carnations, what I used to know about media buying did not amount to a hill of beans.

"So, like my competition, I depended on radio, local newspapers and the inevitable neighborhood grapevine.

"But as my business began to branch out from corsages to conventions, bouquets to banquets, I wanted a media buy that would reach more successful businessmen without nipping too far into my advertising budget.

"Then last year, my advertising agency Harris McKenna Meng- told me about MNI.

"Magazine Networks, they said, is an inexpensive way to buy national upscale magazines in compatible local groups. With networks you can choose demographically,

geographically, even psychographically markets as local and diverse as Beverly Brooklyn, Kansas City and Kalamazoo.

"So in the past year, ads for Nettie's appeared in magazines like Time, Newsweek, U.S. News & World Report, Dun's Review, Nation's Business, Sports Illustrated, Business Week and, of course, Money.

"And our business has grown bigger than ever, while—unfortunately—the flower industry in general has wilted slightly. If that smell sweeter than roses, it's success."

If you want to find out more about Magazine Networks and how it can be used for heavy ups, test-marketing or special promotions, call Floyd Sembler at (212) 661-4

There's a lesson to be learned from a man who buys media with his own money



© 1987 Magazine Networks, Inc. 100 Park Avenue, New York, N.Y. 10017

STARE'S ANGELS

According to recent treasurer's reports of Harvard University, the following have been large, regular donors to Dr. Fredrick J. Stare's nutrition department at the School of Public Health:

Ajinomoto Company of New York
(a monosodium glutamate marketer)
Amstar Corporation
Beatrice Foods
Beech-Nut, Inc.
Campbell Institute for Food Research
Carnation Company
Coca-Cola Company
Continental Can Company
Council for Tobacco Research
CPC International

E. R. Squibb & Sons
Foundation; Funds of Norton Simon
(food packet)
General Electric Foundation
Gerber Products Company
Grocery Manufacturers of America
H. J. Heinz Company Foundation
Hoffman-La Roche
(pharmaceuticals)
International Sugar Research Foundation
John A. Hartford Foundation
(the A & P parent fund)
Kellogg Company
Kraftco
Lever Brothers Company
Marion Laboratories
MEDCOM, Inc.
Miles Laboratories
Monsanto
Nabisco, Inc.
National Biscuit Company Foundation
National Canniers Association

National Fisheries Institute
Nestlé Foundation
Nutrition Foundation
Oscar Meyer & Co.
Pepsico Foundation
Perdue, Inc.
Pfizer, Inc.
Procter & Gamble
R. T. French Company
Richardson-Merrell
Searle Laboratories
Smith Kline & French Laboratories
Standard Brands
Star Kist Foods
Stouffer Foods
Sugar Association
Swift & Co.
Thomas J. Lipton Foundation
Tuna Research Foundation
United Brands Foundation
United Fruit Company Foundation
United States Brewers Association

Both in his Upjohn manual and in his *Panic* book, Dr. Stare erroneously reports that the Pauling thesis has been disproved by controlled experiments. He mentions only two, both of which actually showed that those taking vitamins caught fewer colds and recovered more quickly on the average than those who did not. The second test of Pauling's vitamin theories, as published in the *Journal of the American Medical Association*, in March 1975, is truly remarkable. Test volunteers quickly learned which pills were the vitamin and which were the placebo—a circumstance that should in itself have put an immediate stop to the test. So many volunteers quit the test (apparently because they had lost confidence in it) that it was halted after nine months. As for the results favoring vitamin C, the paper said they might be explained by the failure of the controls. In other words, the very ineptness of the test was cited against Dr. Pauling's view.

The point here is not whether Dr. Pauling or Dr. Stare is right about vitamin C but rather how much confidence we may have in the information sciences that determine national health policy. Dr. Samuel S. Epstein, of the University of Illinois Medical Center, argues that much of the information base, having been generated or inspired by the food and chemical industry, is "suspect."

If that data base is indeed askew, the fact deserves wide public concern, for it raises the specter of major health scandals. Dr. Epstein, a well-known specialist on cancer in children, has long argued that carcinogens in the environ-

ment may be a major factor in the development of cancer in human beings. In a forthcoming book, *The Politics of Cancer*, he charges that these environmental perils have been covered up by slovenly or downright fraudulent research.

"Policy is based on the assumption that our information is accurate," he told me recently. "It's not. For example, it's generally assumed that saccharin is useful in combating obesity. [But] in fact, it induces a drop in blood sugar, which stirs up the appetite. Rats on saccharin put on more weight. Most saccharin is consumed by adolescents—a candy bar in one hand and a diet drink in the other."

THE WHOLE AREA of soft drinks and sweeteners is a touchy one. Stare's colleague, Dr. Whelan, herself belongs to the Pepsi-Cola—or rather, Tab—generation. In the preface to the hard-cover edition of *Panic*, she says the book was her idea: "For ten years, I had been enjoying the noncaloric sweet life. I shook a few drops of a miracle liquid into my coffee each morning, quenched my thirst at lunch with a chilled bottle of calorie-free soda, and garnished my dinner salad with a thick, creamy, and not guilt-provoking diet dressing."

She was frightened out of this gastronomic idyll, she relates, by the news that her saccharin ambrosia had caused cancer in "some unfortunate sweet-toothed rodents." So she tried "natural foods" but didn't like them. Then she read up on the facts (Dr. Whelan is not a physician but a Ph.D. demographer turned publicist) and learned that concern about ingesting food additives was

"totally unfounded." Finally, she enlisted Dr. Stare to write a book that would be neither by "those personally involved in the food industry" nor by "those on the other side."

But Dr. Stare hardly qualifies as a person not involved with the food industry. In fact, he has been something of a spokesman for the industry ever since he testified before Congress for Kellogg, Nabisco, and the Cereal Institute, in 1970, asserting that their products—which were up to 70 percent sugar—provided better nourishment for children than would an old-fashioned breakfast. (Dr. Stare has also been a consultant and frequent expert witness for the sugar industry for many years.)

Dr. Stare said at the time that he took no fees from the cereal makers. But it transpired that he did receive retainers from them. When confronted with this fact, he said that these retainers plus his additional fee as a director of the Continental Can Company amounted to only about \$10,000 a year in all. Six months after the 1970 hearings, the Kellogg Company donated \$2 million to Stare's department at Harvard. Further, Dr. Stare confessed to me that when Kellogg had expressed an interest in having a study done on whether sugared cereals promote tooth decay in children, he had referred the company to a friend of his at the Harvard School of Dentistry, who had agreed to take on the project. The study's findings—that sugared cereals do not promote tooth decay—have been widely publicized, without mention of the Kellogg sponsorship.

Ties such as these between academe

X

and the food and chemical industries were the subject of a 1976 report by Congressman Benjamin Rosenthal (D.-N.Y.) and the Center for Science in the Public Interest. A dozen other universities were mentioned in the report, but Harvard's nutrition department was singled out as being "riddled with corporate influence."

Even the prestigious Dr. Jean Mayer, the distinguished former chairman of the department, who left Harvard two years ago to become president of Tufts College, did not escape criticism. Dr. Mayer has publicly rebuked Dr. Stare as one of those "favorable to the sugar interests" who have distorted the evidence. But Mayer himself has plugged textured vegetable protein without mentioning that he is a director of Miles Laboratories, a manufacturer of the product.

Dr. Stare handles questions about his industrial ties with weary good humor. When asked about industry funding for his work, he drew from his wallet a worn strip of paper and, glancing at it, told me that his department's budget, which ranges from \$3 million to \$4.5 million a year, is met 80 percent from government grants, 6.5 percent from foundations, 6 percent from endowments, and 6 percent from food and chemical companies.

"Never more than six percent from industry," he said.

This sort of assertion is the despair of Dr. Stare's friends in the profession: Harvard's annual reports show that direct gifts to his department from the food industry average more than \$500,000 a year—which is appreciably more than the 6 percent figure he cited to me. Most of the foundations and individuals giving money to Stare's department are also connected with the industry, and the department's endowment funds come chiefly from such companies as Kellogg and General Foods, which has a large plaque in the school entrance.

Dr. Stare's colleagues defend him better than he does himself. They point out that he is an independently wealthy man—an heir to a Midwestern canning company that was acquired by the conglomerate Stokely-Van Camp—and that he has given most of his outside earnings to the nutrition department, which, as I've noted, he founded in 1942 and built up to its present eminence.

The professor makes no bones about swapping favors to the industry for donations to his department. He likes to tell how the Swift meat packing company ran into objections from the British Food and Drug Administration

when it proposed to inject tenderizer into cattle just before they were slaughtered. Dr. Stare says he went to London and persuaded "my friends at the [British] FDA" that it was no different from tenderizing beef after it becomes a steak. (It does, though, deprive the consumer of a choice.) He took no fee for the service but suggested a donation from Swift to his department.

"I do lots of things," he said, "simply because I'm interested and I have friends. But I never send a bill."

Dr. Hegsted said: "I agree that Fred goes too far in resolving all questions in favor of whatever we are doing now... [But] Fred did a pretty good job of trying to find good people here and never put any pressure on us. If he'd just get off this sugar and additive kick."

Reminded that his magazine had attacked virtually all critics of additives in a special issue that is still being circulated, Hegsted replied: "I tread a narrow path myself—*Nutrition Reviews* is subsidized by the Nutrition Foundation. I accept responsibility, but that issue was edited by someone else."

As for company subsidies in general, Dr. Hegsted said: "I've got the opposite complaint. The food industry doesn't put any money worth a damn into research.... When you look at the advertising budget of General Foods and then at the few thousands it contributes, it's getting a lot for peanuts." (General Foods spends more than \$200 million a year—and the industry as a whole is estimated to spend some \$3 billion a year—on advertising. The Nutrition Foundation says it contributes about \$400,000 a year for research on nutrition. Individual food companies give millions more, but much of that is for studies that will directly benefit their technology and marketing.)

"You know, Fred Stare doesn't have the greatest reputation," said Dr. Stanley Gershoff, formerly of Harvard and now at Tufts. "I [have] disagreed with him on many things. But not once in twenty-five years did I see any member of the faculty influenced by Stare. He never put any pressure on me."

Dr. Stare himself takes all the flak serenely. "A lot of the public, and unfortunately some of my colleagues, think I'm a monster—a paid tool of the food industry," he told me. In fact, he continued, early in his 25-year term as editor of the foundation-subsidized *Nutrition Reviews*, "the president of the foundation objected to several pieces because they were a little too anti-industry. I told them I was the editor, and I was going to publish it my way or

[they could] get another editor.... Not once did they overrule me."

7

One confirmation of Dr. Stare's claim to independence is a no smoking sign on his wall. The Council for Tobacco Research—which does for the cigarette industry what the Nutrition Foundation does for the food-and-additives industry—has been a faithful contributor to Dr. Stare's department, but he has repeatedly argued that it is cigarettes and not additives that are responsible for the rise in cancer.

In his early years as a medical researcher, Dr. Stare did fruitful work on fat emulsions in the blood. But he abandoned research to teach and to raise money. "In the department of nutrition," he said, "there were five or six who did research. I couldn't tell them what to do—I couldn't and I wouldn't."

Asked if his colleagues had ever found any food chemical to be harmful, he replied: "No, but we have never worked on this. That would be the work of food technologists."

Yet it is his prestige as head of the department of nutrition at Harvard's School of Public Health that has lent weight to his defense of additives. I found no serious scholar in the field who fully agreed with him, and indeed his own dean and two fellow professors recently rebuked him publicly for using his position to attack the Delaney Amendment, which bans carcinogens in a campus publication. But his conscience appears to be perfectly clear.

"Fred Stare is the only human being I've ever known whom I can't figure out," Dr. Gershoff said.

A clue to the puzzle may be the nostalgia with which Stare talks about his father's big cannery in Columbus, Wisconsin, where he worked as a boy. His mother lives in Columbus and was heartbroken, he said, when Stokely-Van Camp recently decided to close the cannery down. Way back, the cannery used to add a little sugar to the peas to make them taste better, Dr. Stare has said pointedly. It may well be that he is still a food processor at heart and takes any criticism of the product to be a criticism of his family and its way of life.

At the close of my talk with Stare I said, "Suppose it turned out that you were wrong, that one of the additives you defend had hurt many thousands of people?"

Like a country doctor humoring a worried patient, he smiled, then said. "I'd be very sorry." ☉

John L. Hess is a reporter for The New York Times and is author, with Karen Hess, of *The Taste of America*.