

# NIH Deals Gingerly with Diet-Disease Link

*Federal dietary guidelines for disease prevention have scant support from NIH, but pressure to take a stand is building*

A battle over what we should eat to prevent disease has split the federal establishment down the middle. Congress, appalled by the rising cost of health care, sees prevention as a new panacea. It

*This is the second of a two-part series on the politics of nutrition.*

now wants to alert the public to links between diet and such chronic diseases as diabetes, hypertension, heart disease, and cancer. The U.S. Department of Agriculture (USDA), the source of conventional wisdom about what we should eat, wants to spell out the same message. Not everyone in Washington sees it that way, however. Officials at the National Institutes of Health (NIH) are skeptical, saying that in most cases hard evidence of such a diet-disease link has not yet come to light. It would be better, they say, to tell the public nothing rather than to call for a radical change in the American diet that might prove useless.

The battle lines have been drawn in an argument over proposed federal dietary guidelines for the prevention of disease. Officials at USDA are pushing hard for guidelines bearing the government's seal of approval, while those at the Department of Health, Education, and Welfare (HEW) in general and NIH in particular say they don't know enough to cast presumptions into federal policy. For the moment, the two sides are in a deadlock. But as many on Capitol Hill are loath to question the diet-disease link, or even to accept "we don't yet know" for an answer, pressure to break the stalemate is never far off. Says Guy Newell, deputy director of the National Cancer Institute: "When a Senator looks you square in the eye and says, 'You mean to tell me that with a budget of \$1 billion a year you can't tell the American public anything?' that's a hard one to answer."

Arm twisting of this type has had an impact. Though NIH has so far taken a tough stance on the guidelines, in other areas of consumer education it is paying lip service to the diet-disease link. On the Mall in Washington, D.C., for instance, NIH recently held a Nutrition Fair. Under a billowing orange and yellow circus tent, people dressed up as ba-

nanas, beans, hot dogs, and a salt shaker sang and danced for health, warning the audience of children about the consequence of a bad diet.

Pressure on NIH to educate the public has been building for the past 2 years. It comes from USDA. It comes from consumer-interest groups, such as the Center for Science in the Public Interest (CSPI), which recently raked two institutes over the coals for not better publicizing the results of their diet-related research. It comes from the House, where Representative Frederick Richmond (D-N.Y.) held hearings in 1977

(Mark Hegsted, the Harvard biologist who helped edit *Dietary Goals*, has since become the director of USDA's human nutrition center.) Although a contract with NAS was written, USDA never signed it. They got wind of a speech that Gilbert Leveille, then chairman of the NAS Food and Nutrition Board, made in January 1978. "The American diet," he told the American Farm Bureau Federation, "has been referred to as 'pathogenetic' [sic] by some and as 'disastrous' by others, implying that our national diet has deteriorated in the past 50 years. I submit that such a conclusion is er-



NIH "Grocery Group" performs at Nutrition Fair. [NIH photo]

and 1978 on nutrition education. It comes especially from the Senate, where a publication of the Select Committee on Nutrition, chaired by George McGovern (D-S.D.), touched off the push for disease prevention which today confronts NIH.

*Dietary Goals for the United States* took the popular preoccupation with health foods and brought it to Capitol Hill. *Dietary Goals* claims that an "epidemic of killer diseases" such as stroke, heart disease, and cancer is linked to changes in the eating habits of Americans during the past 50 years. It calls for Americans to reduce their consumption of meat, fat, cholesterol, sugar, salt and to eat more fruits, vegetables, unsaturated fats, and cereal products (see box). The *Dietary Goals* came out in January 1977. By November 1977, USDA had taken *Dietary Goals* as a potential policy base and had asked the National Academy of Sciences (NAS) to do an evaluation of it for use in a nationwide guide.

neous and misleading. The American diet today is, in my opinion, better than ever before and is one of the best, if not the best, in the world today." Someone at USDA apparently decided that NAS might not be "objective." Soon afterward, under increasing pressure from Congress, an HEW-USDA task force was organized by Donald Fredrickson, director of NIH, Donald Kennedy, commissioner of the Food and Drug Administration, Rupert Cutler, USDA assistant secretary for Conservation, Research, and Education, and Carol Tucker Foreman, USDA assistant secretary for Food and Consumer Services and former executive director of the Consumer Federation of America. It was set up to write guidelines on the basis of the recommendations made in the *Dietary Goals*.

The task has been anything but easy. HEW, for instance, was to have drafted its own guidelines by last March and to have exchanged them with guidelines prepared by USDA, at which point a

compromise position would have been worked out. But the March deadline came and went, and nothing changed hands. The guidelines drafted by HEW apparently left something to be desired. "They were terrible," said George Bray, nutrition policy coordinator for HEW. "No, I can't tell you anything else about them. Take my word for it, they were trash."

Not everyone is happy about the delay. "We're the ones who run more risk by taking a stand than they do," says Audrey Cross, nutrition coordinator at USDA. "The moment we put out a statement, all the producer associations are going to be down on our neck. They're not going to go over and complain at HEW. They're going to come over here. Yet it's the people at HEW who are dragging their feet." To Michael Jacobson, director of the Center for Science in the Public Interest, HEW's reticence is built into the system. "HEW's conflict of interest is with the scientific community," he says. "Scientists, at NIH and elsewhere, constitute a constituency that calls for perpetually higher research budgets. No knowledge is ever enough knowledge, so instead of urging that current knowledge about foods and health be conveyed to the general public, scientists urge more research."

It's not that simple, says Artemis Simopoulos, chairperson of the nutrition coordinating committee at NIH. "Even when there is a clear-cut suspect," says Simopoulos, "such as cholesterol and coronary heart disease, there can be numerous other risk factors." She notes, for example, an NIH-sponsored study of the residents of Framingham, Massachusetts. It showed that increased concentrations of serum lipids, including cholesterol, phospholipids, and  $\beta$ - and pre- $\beta$ -lipoproteins, as well as hypertension, obesity, low vital capacity, abnormalities in an electrocardiogram, diabetes, genetic disposition, smoking, and sedentary life, were all linked to a higher incidence of coronary disease. To clarify the picture, the National Heart, Lung, and Blood Institute (NHLBI) started a study in 1972 to see if controlling three of the risk factors—hypertension, cholesterol, and smoking—would affect the incidence of coronary heart disease. The study will not be completed, however, until 1982.

Direct confrontation between NIH and USDA concerning the guidelines has thus far produced meager results, and it now seems to have become a waiting game. Take, for example, a seminar on the politics of nutrition, held in April at NIH and attended by USDA policy-

makers. Asked when the guidelines were going to arrive, Allan Forbes, who heads the HEW task force, hesitated and then answered: "They haven't disappeared into thin air." He then proceeded to talk at length about what was then a soon-to-be-published report by the American Society for Clinical Nutrition (ASCN) that

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would evaluate the scientific basis of the *Goals*. Given such outside evaluations, said Forbes, the guidelines might be out by this fall.

If the ASCN report is going to become the basis for the guidelines, however, they will be weak indeed. The results of the 1½-year study, presented on 5 May in Washington at the society's annual meeting, were sober in the extreme. The only clear connections found between diet and chronic disease were those between salt and hypertension, sucrose and dental caries, and alcohol and liver disease—not exactly radical departures from the conventional wisdom. It was also agreed that obesity is, in general, bad for health. The group, co-chaired by William Connor of the University of Oregon and Edward Ahrens of Rockefeller University, found little unambiguous evidence for the role of fat and cholesterol, and, surprisingly, they found no evidence that the amount of sugar consumed affects the onset of adult diabetes. In addition, the ASCN panel of nine scientists found potential risks in using a diet high in polyunsaturated fats—a specific recommendation of the *Dietary Goals*. Polyunsaturates, they said, may form peroxides if few anti-oxidants are eaten, may become carcinogens under some circumstances, and may increase the tendency to form cholesterol gallstones.

Interestingly enough, both sides claim to be pleased by the report. "It was the best they could have done," says Simopoulos. "They looked for a strong scientific base and they didn't find it." Yet the *Dietary Goals* people claim they have not been thrown off balance. Chris Hitt, a McGovern staffer who follows the ups and downs of nutrition politics, said: "From a policy perspective, the report is a very good document for us. They said that the *Goals* were safe, that there were no risks. . . . We felt it was a step forward."

His position, however, seems a bit of a switch. Touting the no-risk aspects of

*Dietary Goals* rather than emphasizing their ability to prevent disease seems to be a defense used more and more often. Mark Hegsted put it this way, "The question to be asked is not why should we change our diet, but why not? What are the risks associated with eating less meat, less fat, less cholesterol, less sugar, and less salt? There are none that can be identified and important benefits that can be expected." Many take exception to this position, however, saying not only that risks do exist but that public expectations would be needlessly raised. Said Cortez Enloe, editor of *Nutrition Today*: "Suppose that, having accepted the McGovern promises and made the sacrifices, it turns out that the incidence of death from cancer does not go down. What then will happen to the public's confidence in the health profession? What will unfulfilled promises do to the science of nutrition? No one seems to have considered these questions."

Debate over the health benefits of the *Dietary Goals* has been intense. Less talked about, however, is how they may have also been meant as a political shot in the arm for George McGovern. The story is simple. A select committee studies a given subject but has no powers to initiate legislation. Such a committee is appointed at the beginning of a 2-year session of Congress and is supposed to disband at its close. The Senate Select Committee on Nutrition, which Senator McGovern chaired, had unusual staying power. It had been organized in July 1968 to look at "hunger in America," and ever since had been growing in budget and power. In 1976, however, the Senate reorganization study group, led by Senator Adlai Stevenson (D-Ill.), said the McGovern committee had served its useful purpose and recommended that it be disbanded. Under the proposed reorganization, McGovern's select committee would be turned into a nutrition subcommittee that would be under the aegis of the Senate Committee on Agriculture. This subcommittee would have much less power than the select committee, which had a budget of \$450,000 and a staff of 16.

Shortly before the congressional vote for reorganization in January 1977, the McGovern committee announced, with great fanfare, the proposal to make changes in the American diet in hope of avoiding the "epidemic of killer diseases." The timing of the release has led many to believe that the publication was politically motivated. Says Enloe: "They were fighting for their life. Their tenure was up. But Congress said, no, sorry George, you're going to have to go

over and live in the agriculture committee. So to prove that they were really doing something, they got out all their old hearings and pasted up all the things that looked alike, and put this flossy name on it, *Dietary Goals for the United States*. They had a big press conference. No hearing, just a press conference. This was supposed to impress Congress. But Congress wasn't impressed. They blasted him out of business anyway." McGovern's present state of affairs is, no doubt, a letdown from the halcyon days of the select committee. He now has two staffers.

Though the health benefits of the *Dietary Goals* and the fate of the HEW-USDA guidelines are still up in the air, pressure to preach McGovern's message to the public still comes down on NIH. A good deal of it, for example, comes from Michael Jacobson, director of the Center for Science in the Public Interest (CSPI). At the start of a recent interview, Jacobson, in answer to a question about CSPI's point of view on nutrition education, cracked a smile, leaned back in his chair, and said:

*Eat less sugar. Eat less fat.*

*Bread and potatoes are where it's at.*

The simplicity of the slogan belies a serious effort by Jacobson to get the institutes to take a stand. He regularly berates their programs, saying they have disregarded their congressionally mandated duty to apply current knowledge to prevent disease. In April, for example, he fired off a letter to heart institute director Robert Levy. There has been research at the institute, said Jacobson, which shows that eating a diet rich in saturated fat, cholesterol, and sodium increases one's risk of developing cardiovascular disease. This research is sufficiently compelling, Jacobson noted, that the "American Heart Association, NHLBI's Task Force on Arteriosclerosis, the Inter-Society Commission on Heart Disease Resources, and other highly respected organizations have for years urged that Americans reduce their intake of saturated fat and cholesterol in order to lower the risk of developing heart disease and stroke. . . ." Yet Jacobson noted that NHLBI has done little to apply this knowledge by, for example, initiating a nationwide nutrition education campaign.

But NHLBI does, in fact, have some pilot health-promoting projects, such as the *Eater's Almanac*, which is distributed in a chain of Washington, D.C., supermarkets. The purpose of the almanac is to try to educate consumers at the point of purchase so that they reduce their consumption of saturated fat, cho-

lesterol, salt, and calories. For Jacobson, however, it is still not enough. "These efforts," he says, "which reach only a fraction of the population, are woefully inadequate in light of the much more comprehensive statutory mandate NHLBI should be endeavoring to fulfill." And to ensure that the institute will obey what he sees as the mandate, Jacobson said that "legal action may be necessary."

Such pressures have had an effect. Little by little NHLBI and the other institutes are stepping up their public education programs. Many of these programs are conservative, not straying substantially from the we-don't-yet-know-enough position on diet and chron-

ic diseases. Others take a more radical position. There is, for example, a draft copy of "Dietary recommendations to minimize cancer risk" now circulating at the cancer institute. And on an institute-wide level, a variety of programs are being developed. The NIH Nutrition Fair, held on the Mall in Washington on 22 to 24 June was part of HEW's Healthworks '79 fair. The first of its kind, this fair is a prototype of fairs that HEW officials say they would like to see sponsored nationwide. In addition to the dancing banana, NIH exhibits featured a tuna-sandwich-making contest and a walk-through fat cell. Nutro the Robot answered questions about what is good to eat. The NIH "Grocery Group,"

## The Ever-Shifting *Dietary Goals*

In January 1977, Senator George McGovern called a press conference to introduce *Dietary Goals for the United States*—a prescription for what the public should eat to avoid "the epidemic of killer diseases" such as diabetes, stroke, and cancer. Feeding on the popular preoccupation with health foods, the *Dietary Goals* called on Americans to increase their consumption of fruits, vegetables, whole grains, poultry, fish, skim milk, and vegetable oils, and to cut their consumption of whole milk, meat, eggs, butterfat, and foods high in sugar, salt, and fat. Specifically it asked consumers to:

- Increase carbohydrate consumption to account for 55 to 60 percent of energy (caloric) intake.
- Reduce overall fat consumption from approximately 40 to 30 percent of energy intake.
- Reduce saturated fat consumption to account for about 10 percent of total energy intake; and balance that with polyunsaturated and monounsaturated fats, which should account for about 10 percent of energy intake each.
- Reduce cholesterol consumption to about 300 milligrams a day.
- Reduce sugar consumption by about 40 percent to account for about 15 percent of total energy intake.
- Reduce salt consumption by about 50 to 85 percent to approximately 3 grams a day.

Health food fans loved it but certain food associations were furious. Here, after all, was the Congress of the United States telling the public not to eat their products. Pressure was brought to bear, especially, some claim, from the cattle industry in McGovern's home state of South Dakota. In December 1977, a second edition of *Dietary Goals* appeared. Instead of asking consumers to eat less meat, the *Goals* now recommended that people should reduce their intake of animal fat, "and choose meats, poultry and fish which will reduce saturated fat intake." The new edition removed the advice about reducing the whole milk and egg consumption of young children and, for adults, raised the suggested limit for salt, which had been 3 grams a day, to 5 grams. And changes are still being made. After the second edition came out, McGovern told the Salt Institute that the 5 grams of salt per day referred only to salt used by choice and did not include the "non-discretionary" salt already present in bought foods. Hence the limit on salt intake has increased to 8 grams a day.

And there is evidence that still another industry has thrown its weight around. McGovern and his staff recently came out with kind words for Ronald McDonald, Taco Bell, A & W, Tastee Freeze, and the like, saying that "on the whole, quick foods are a nutritious addition to a balanced diet."—W.J.B.

whose members had names like Tommy Tomato and Sugar Sweet, danced for good dietary habits. In one skit they sang to the tune of Love and Marriage:

*Eggs and cholesterol,  
Bacon and cholesterol,  
Even butter on toast  
Has cholesterol,  
And all together, say,  
You should have 'em once a week  
Or maybe twice,  
But not every day.*

The kid's cholesterol song, the no-cancer diet, and the *Eater's Almanac* show that the NIH position is far from inflexible, but whether they are conscious concessions to political pressure or just chance occurrences is not clear. Doubts

about the diet-disease link have not gone away, and NIH officials, bolstered by the findings of the American Society for Clinical Nutrition, have so far stalled or taken a hard line on the HEW-USDA dietary guidelines. Will it last? If the NIH stance of 2 years ago were in effect today, there would be no doubt. At that time, Fredrickson addressed a hearing on nutrition education held by the House Committee on Domestic Marketing, Consumer Relations, and Nutrition. "I have been concerned about this question as director of the NIH and the Heart Institute and as a scientist in the field for 25 years," he said. "I feel that the problem we still have is that we can't bring you proof that changing the diet for

the average American will lengthen his life or reduce his likelihood of having a coronary." One doesn't often hear that type of statement today. In fact, Fredrickson recently told *Science* that he's had second thoughts on the subject. "We've more or less become adjusted to the fact that we probably will never be able to get the ideal proof that we want. . . . The weight of the evidence seems to be strong enough so that we can now direct people toward a kind of set of guidelines." Two years have brought ever-increasing pressure from Congress, from USDA, from consumer advocates. NIH is on the defensive, and it remains to be seen just how far the bottom line will drop.—WILLIAM J. BROAD

## Jessica Mathews, NSC Aide for Global Issues

### *Young biochemist quits White House for local paper*

The National Security Council is about to lose its only biochemist in the departure of Jessica Tuchman Mathews. Mathews ran the global issues office, handling such topics as human rights, arms sales, and nuclear nonproliferation.

Though close to the center of power, Mathews saw Jimmy Carter hardly at all. "I know how the President thinks because of his comments on my memos," she says. "Over time you develop a very clear picture of where his concerns are." But, unlike former speechwriter James Fallows, she knows little of Carter's personality: "It is hard to say what kind of a person he is when I don't know him."

Mathews joined Brzezinski's staff in January 1977. The daughter of historian Barbara Tuchman, she did biochemistry research at Caltech and MIT. A Congressional Science fellowship from the AAAS made possible a transition from science to politics. Mathews worked for Congressman Morris Udall, first on energy matters and later as director of issues and research for Udall's presidential campaign, a job which brought her into contact with the foreign policy community.

Mathews was only 31 when she started work in the White House, or rather in the Old Executive Office Building next door. Brzezinski's idea in creating the global issues office was to find a resting place for all issues that could not be solved on a regional basis. With one colleague,

Leslie Denend, Mathews found herself in charge of preparing national policy on nuclear nonproliferation, chemical, biological, and radiological warfare, human rights, international environment, international organizations, and Africa. "I was working 80 hours a week at first, staying until 11 or midnight every night," she says.

Even after some issues had been shed, the workload was still heavy. "You get a full in-tray every day and 6 inches of cables. You don't ever have time to learn an issue in depth," she notes. Also Brzezinski is not an easy person to work for. According to Mathews, "He is tough, he has very high standards, and he demands a lot in the way of performance. He will call you at any time and want a certain kind of product done by the next morning. He thinks it is a great honor to work on the NSC staff and that people should take what goes with it."

Mathews' dealings with the President were always through Brzezinski. To an outsider, the lack of more frequent direct contact might seem surprising in that the three main issues she dealt with—human rights, nuclear nonproliferation, and arms sales—are among the most distinctive initiatives of the Carter Administration.

In adopting human rights as an issue, Mathews feels, Carter "lit a match to a fire that was already laid." There was a lot of stored-up interest in the subject

both at home and abroad. Memos about human rights, some written several years previously, flooded into Mathews' office from the State Department. "It was like lifting the cap off a hot coke bottle."

Implementing the policy was harder than framing it. One problem was that Congress, in a spell of enthusiasm for human rights, devised what seemed to the White House to be inappropriate enforcing amendments to various aid bills. "It puzzled me that although the intention of the Administration was unmistakably clear, the Congress continued to have the feeling that if they didn't keep pushing, the Administration's commitment to human rights would evaporate," Mathews comments.

She denies that the human rights policy may pose a destabilizing threat to the leaders of the Soviet Union: the aim of the policy is not to change governments but to "make them provide the maximum of human freedom in their existing system." The protests by American scientists in support of their colleagues in the Soviet Union has been particularly effective, Mathews believes. "The Soviets care deeply about scientific exchanges with the United States, so when they are curtailed by the American scientific community, that has an enormous effect, particularly because it is something that government can't turn on and off. The action by scientists here has been enormously important."