

7. In order to implement the activities proposed in points 1-6, there must be coordinated efforts on the part of all those involved in nutrition education, including nutrition and home economics educators, various agencies of the federal government, industry, state departments of health and education, universities and professional schools, teacher education programs, and recognized organizations committed to nutrition and nutrition education.

This coordination of efforts should ideally emerge from a grassroots level and continue upward through state, regional, and federal levels. Some of the responsibilities which must be assumed are:

- identification of gaps and overlaps in existing nutrition education efforts
- coordination of groups involved in nutrition education, i.e., federal, state, and local governments; food industry; universities; schools; communities; consumer and volunteer groups; media; extension and health agencies; and professional organizations

- better monitoring and evaluation of existing programs
- setting of priorities for nutrition education, i.e., identification of target groups and sequenced goals with realistic time-tables
- stimulation and integration of nutrition education research funding under private and public auspices
- dissemination of validated nutrition education materials
- establishment of nutrition resource centers for technical material, consumer information, and resource personnel.

#### THE NATIONAL NUTRITION CONSORTIUM BOARD STATEMENT APPROVAL POLICY

Policy and programs of the consortium are determined by a board composed of three voting delegates from each sponsor society and one nonvoting delegate from each liaison society. Board members serve for a three-year term.

Positions are taken and statements made by the Board of the National Nutrition Consortium. Official statements must be approved by two voting members from each

of the sponsor societies. Liaison organizations do not vote on board positions. Board statements and positions are not approved by the governing councils of the member organizations, but they are communicated via the board members to all member organizations. Board statements on a particular topic take into consideration existing positions of member organizations when such are available.

#### Sponsor Organizations\*

American Dietetic Association  
American Institute of Nutrition  
American Society for Clinical Nutrition  
Institute of Food Technologists  
Society for Nutrition Education

\*Since this statement was approved by the board, the American Society for Parenteral and Enteral Nutrition has joined the consortium.

#### NCNE Supplement

The list of members of the Task Force on Low-Income and Elderly Populations (JNE 12 [No. 2, supp.]:ii) should also have included Joncier Greene, B.S., Aging Services Program Specialist, DHHS-Office of Human Development Services, 330 Independence SW, Washington, D.C. 20250.

#### GUEST EDITORIAL

## The Science and Politics of Nutrition Education

Joan Dye Gussow

I came into the presidency of the Society for Nutrition Education and was viewed by many people, I suspect, as a figure of somewhat dubious reputation—advocacy oriented, perhaps left-wing (Does nutrition have wings? Or only feet? Two left feet sometimes.) a little outspoken, anti-industry, and so on. However, your votes for me meant that at least some of you—while you might not always agree with me on individual issues—*trusted me* to be an open-minded president. I have tried to live up to that trust. It has always seemed to me that one of the *great* strengths of this organization was that it managed to keep doing useful things, taking important stands, *because* it kept its balance. SNE's great credibility on issues concerning nutrition education arises, I think, from the breadth of its membership and its board of directors. As president, of course, one feels a certain additional responsibility—since one is often writing or speaking in

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circumstances where one is acting as SNE's *representative*. In this address, however, I am not speaking for, but with the membership, and I am going to do something I have tried *not* to do this year, and that is to be very personal.

Shortly before this annual meeting, I received a letter from someone who wished to have it known that she was resigning her membership. She was resigning, she said, because the Society for Nutrition Education had "become less professional and less involved in nutrition education, and the officers more involved in political activism and personal aggrandizement, espousing ideas based on emotional concerns rather than on data derived from controlled scientific experiments." Now people have resigned from SNE before for a variety of reasons, and this resignation would not be worth bringing up except that it makes very vivid a kind of schism—a very dangerous, useless, and ultimately self-destructive schism—that appears to be developing in the nutrition profession. The schism is between what some people call "science" with a capital *S* and what some people call "politics" with a capital *P*. The notion seems to be that there are some of us who are "political" and there are others of us who are "scientific." Surely there is no need to point out to you which of those is the dirty word. Most people probably wouldn't mind too much being called "a scientist"; but almost no one wants to be called "a politician."

The process of electing public officials is what we carelessly designate as *politics*. But what really is *politics*? My 1912 *Century Dictionary*—to which I always turn when I

want wisdom and not merely information—says that politics is “the art of the regulation of man in all his relations as a member of the state.” What does that definition imply? It turns out that decisions about where and when and how to regulate men (and women too, presumably) in their relations to the state always involve the allocation of resources. Thus, political decisions turn out to be those which determine whether we will spend money trying to prevent crime by rebuilding our sense of community or by hiring police; or whether we will try to promote health by encouraging healthy life styles or by underwriting coronary care units and kidney dialysis centers. Political decisions are decisions about how money or time or energy or people will be allocated to one activity or another in mediating the relationships between individuals and groups in a society. So, one useful definition of *politics* is that *it is the art of making resource allocations at various governmental levels.*

Such an analysis immediately makes clear the fact that science is not—and cannot be—apolitical. For doing science—especially doing the big, expensive science of technological societies—requires resources. (Anyone who doubts this statement in relation to nutrition should hang around a university nutrition department at grant-proposal writing time.) Science is simply a way of getting data, of attempting to get replicable and objective information with which to answer certain questions. But not all questions are equal—either in the resources they require for their investigation or in the implications of their potential answers. Hence society—making “political” decisions—must decide to allocate resources to the investigation of only certain kinds of questions. The classic illustration of the allocative role of politics is in the phrase “guns or butter” (guns or margarine?) which suggests that we must almost always make choices between one kind of expenditure and another. But who decides which questions get resources allocated to them? This is a topic to which I will give short shrift, since I want to move on to what I consider a more important issue.

I think it worthwhile, however, to point out two things. My first observation is that nutrition science and its application have been relatively short-changed in the resource allocation race, even though there is a great deal of “talk” these days about the importance of nutrition in health promotion. The other observation is that if one is a nutrition scientist and wants to do nutrition science research, then there is a great deal of “political” wisdom in arguing that we don’t yet know enough to design a good diet—and that, therefore, we need money allocated to relevant scientific research. But the issue that I want to focus on is a different one. What most concerns scientists, one would assume, is not the political issue of which projects can generate funding, but the scientific issue of which projects *ought* to generate funding. The really important issues are which questions are worth answering. And that, as I have come only recently to understand, is

where the real conflict begins.

It turns out that the *nature of the questions we ask*—the kinds of questions *we think it important to ask*—is determined by the interpretation we give to the facts we already possess; and that interpretation tends to depend on the world view we start with. For example, one can—based on the same information about fiber, health, and the effects of processing on food—ask at least two different questions. The facts are 1) that fiber is probably important to human health, and 2) that processing removes fiber. If, in looking at the present situation, one concludes that the economics of food will continue to push food processors to extract ever higher prices from the 1,500 pounds or so of food that each of us is able to consume in a year; and if, therefore, one judges that the present trends toward increasing levels of processing will continue to accelerate, then one might well ask: In what form should we be fortifying foods with fiber? If, on the other hand, one concludes that in light of pressures on the food-producing systems of the world, we are not going to be able to continue our product proliferation, that it is increasingly wasteful to take things out of food and then put them back in, then one is apt to conclude that the correct question is rather: In what ways should we be modifying our processing methods so as to retain more fiber in food? One of our large food companies assumed that the correct question was the first one—In what form should we be fortifying foods with fiber?—and they *answered* that question with a diet bread supplemented with powdered tree. How one feels about that product probably has a lot to do with which of those questions one feels to be the correct one.

“The really important issues are which questions are worth answering.”

Let me give you another example of how one’s world view shapes the questions one asks. I had occasion last year to testify before a U.S. federal law judge on the matter of television advertising to children. I was trying to make the point to him that it is probably impossible to prove that a given advertisement causes a certain child to behave in a certain way. We simply do not have research methodologies to do that. What we *could* do, I suggested, was to find out whether specific advertising techniques convinced children of certain things. However, before we could discover whether a specific ad was *misleading*, we would need to determine whether those things it convinced children of were “true.” And determining what is true, I pointed out, is a good deal harder than it might at first appear. Quoting from my testimony: “Consider, for example, a pink substance consisting of 50% sugar and 50% cereal grains welded together into a flake by destructive high-heat processing and suffused with artificial color

and flavor, anti-oxidants, and a few added vitamins and minerals. If an ad for such a product convinced a child 1) that it is a breakfast cereal; 2) that it is a nutritious product; and 3) that it is part of a good breakfast, one's decision as to whether or not that commercial was capable of being misleading would depend first of all on whether or not one believed any or all of those statements to be true. As it happens," I said to the judge, "I do not believe any of those statements is true. I believe the product is a confection, not a cereal. I do not believe it is nutritious, and I do not believe that it is a part of a good breakfast, certainly not a *necessary* part of a good breakfast. Therefore, I would consider such a commercial to be misleading to any child who was convinced by it. On the other hand, there are persons—among them obviously the manufacturers and advertising agency personnel who might make and promote a product like the one I have just described—who would consider all three of those statements impeccably true. For them, such an ad is not even potentially misleading." What we conventionally call research does not—and cannot—provide us with a definitive resolution to such disagreements. What my correspondent who resigned (because we were too political) called "data derived from controlled scientific experiments" does not help us to come to agreement on the truth of those statements. *There is no correct answer* to the question of whether something that is half sugar can be called a cereal. Such interpretational problems can only be resolved by attempting to reach some sort of understanding of where products like pink corn flakes—and ads for such products—fit into the whole system whereby children and their parents acquire and consume food and thereby attain or lose health. It is only thus that one can come to understand whether such products are part of the solution or part of the problem; *and only when we have made that decision* can we decide whether or not we wish (*ultimately arbitrarily*) to define pink corn flakes as "cereals," as "nutritious," and as "part of a good breakfast." (And such a decision will be "political" if we decide to allocate resources to making sure "cereals" either do or do not have 50% sugar.) In other words, only when we keep the whole system in mind and decide which arrangement of the relevant data makes the most sense, only then can we decide which facts about any isolated piece of the system are *relevant* and in that sense "true."

And that's where the conflict comes in. The arguments among segments of the nutrition profession are *not* over the data but over what the data mean and what we ought to do about them. In fact, there are many things we all probably agree about. I think all of us would agree that human beings need certain nutrients and that we need amounts of these nutrients which are neither too high nor too low. Sometimes we can even agree on what *too high* and *too low* mean—at least for some nutrients, in some "normal" populations, at some ages. And I would assume that we could all agree on the prevalence of

**"The arguments among segments of the nutrition profession are *not* over the data but over what the data mean and what we ought to do about them."**

various causes of mortality and—to the extent we measure it—of morbidity and how each has changed over time. We could agree, I think, that the structural formulae of the vitamins are known, that scientists know how to synthesize all of them and know, in many cases, just exactly how they work in the body. And I would assume we could agree on the fact that there has been a marked trend in our countries toward eating more and more pre-prepared foods, both in and out of the home, and a parallel trend toward eating out more; and that there has been an enormous increase in the number of food products in the supermarket and that they have become more complex in their composition so that consumers often have trouble knowing what they are eating. And I would assume we have consensus on the fact that fewer and fewer people are engaged in growing food for more and more of us and that the control over food production, processing, and distribution has moved into fewer and fewer hands over the last quarter century. And we could agree, I think, that there is still widespread hunger and malnutrition in the world and that it is present in some cases in poor countries which grow food to export to the rich and overfed countries. And we can agree that Canada and the United States share between them a grain-growing belt which is one of the great primary producing areas in the world—source of a large proportion of all the world's exportable grain. And if we all read the same reports from the National Academy of Sciences and the U.S. Department of Agriculture, we would all agree, I am sure, that there is a serious soil erosion problem on this continent as well as in the rest of the world, and that this problem is compounded by the increasing acidity of the rain which leaches nutrients out of the remaining soil and renders certain areas unfit for crop growing; and I assume that we can agree that we have moved increasingly toward a kind of supermarket world in which certain areas grow luxury crops which are sent long distances (sometimes by air) to other, wealthier countries. And I think most of us would agree with the United Nations Environment Program that it is a matter of concern that increasing number of pests are—as a result of heavy crop spraying—becoming pesticide resistant on a world scale, thus eradicating the gains from vector elimination programs and allowing a resurgence of malaria and other insect-borne diseases—and that this consequence has nutritional implications. In short, there are a great many things—these and others—about which we can agree. What we do not agree about is 1) how all

these things fit together; 2) in what way they are relevant to nutrition; and 3) what we ought to *do* about them.

None of us, however, should really be troubled by disagreements. It seems highly unlikely and perhaps even undesirable that we should ever be able to agree about the meaning and implications of all the facts and figures, the biological data, the food science breakthroughs, the economic trends, crop projections, marketing orders, and so on that affect the world food supply and its consumers. Critical questioning of each other's work is intended to bring us closer to truth. Thus, it is from *honest* disagreement about what it all means that one learns—at least, ideally. What is troubling is the growing shortage of *honest* disagreement. What is troubling is that we are increasingly hardening our positions.

The recent performance of the Food and Nutrition Board is a good example of this. "Toward Healthful Diets" is poor, or at least inconsistent, science. (Compare, for example, its treatment of the fat/cardiovascular disease link with its discussion of the sodium/hypertension link.) The report is also poor education, since it is unlikely "to reduce the confusion in the mind of the public." (Was the confusion caused by a long-overdue near consensus about diet and heart disease?) And not only was it poor science, and poor education, it was probably even poor politics, since it seems doubtful that it will in the end actually increase the resources available for nutrition research.

Science, education, and politics aside, the recent squabbling among nutrition professionals over who should tell the public what, is a disturbing outgrowth of our increasing inability or unwillingness to hear each other. During the month of May, I was in Australia on a speaking tour. One night in Adelaide I spoke to the Nutrition Society—to an audience of what I had been told were "conservative nutrition scientists." I was talking to them about the method by which I do "research"—which is by reading widely and a lot and by thinking hard—and of the conclusions to which my research had led me—that our civilization is threatening the very biological systems on which we depend for food and that many of our interventions seem to make it worse. I was arguing in favor of smaller, more locally controlled food systems, an argument which some of you familiar with my book *The Feeding Web* may recognize. I mentioned beforehand to one of my Australian acquaintances what I was going to talk about. "Oh my," she said, "that may not be very popular." She went on to tell me that the man in charge of the Nutrition Society in Adelaide was a "bench scientist" who would *hate* what I had to say. That did not surprise me. What did surprise me was that after my speech was over, the "bench scientist" drove my husband and myself back to the hotel. And he began to talk to me about what I had said. He disagreed with me about the probability that we would get unlimited clean energy (he had *much more* faith than I did that we could be able to

clean up fusion power), but he had "heard" my argument about what we were doing to biological systems and about the limits of human ability to predict and control. And while he *did not completely agree with me*, it was clear that he had *heard* me and was thinking. Unfortunately, there are too many people in our nutrition community who don't hear each other and sometimes don't appear to think. Increasingly, we identify each other by code words: cholesterol, eggs, food processing, natural toxicants in foods, food pollution; and having identified which side each of us is on, *we stop listening* because new information disturbs our prejudices.

**"Increasingly, we identify each other by code words . . . we stop listening because new information disturbs our prejudices."**

Permit me a *very* personal story because it illustrates so well what I mean. Last year the *Journal of Nutrition Education* ran a review article on fluoridation which purported to give both sides of the ongoing debate between advocates and opponents. Because I had had the experience in my own community of being faced with some arguments against fluoridation I did not know how to deal with, I wrote a letter to the *Journal* raising two additional points I felt had been omitted from the original article. Using the surprisingly high levels of iodine in processed foods as an example of food supply changes which can result from processing, I expressed concern about our tendency to add substances to the food and/or water supplies without continuous monitoring to catch "magnification" problems in the food chain. In addition, I commented on the civil liberties issues raised by adding to the water supplies any substance not actually required to *purify* the water. It should be noted that I took *no position* on either of these points, deliberately, since I wished to provoke thought on *both sides*, not to create polarization.

It now appears that a number of persons who are rather highly placed in the nutrition community have been going about saying that I am an opponent of both fluoridation and iodization. Unfortunately—though not unexpectedly—no one has ever made such an accusation to my face because they know it is not true. I have never found it useful to have my positions criticized behind my back. It does not help me to overcome my errors and reformulate my world view in terms of *all* the relevant data. And clearly, such backbiting is not designed to help us all arrive at the truth. It is intended to intimidate—which is what we must not allow.

A young nutritionist whom I respect perhaps as much as anyone I know for her intelligence, honesty, lack of bias—and fearlessness—sought me out after my letter on

fluoridation appeared. She told me that she had long had certain civil liberties misgivings about fluoridation. But she had never dared voice her concerns because she believed that no one else "sensible" had such doubts—and after all, who wants to be thrown among the crackpots? What a terrifying and unproductive state have we come to when we do not permit ourselves to think, and most especially do not permit ourselves to think and speak out—for fear of being banished as "unscientific." What is unscientific, of course, is to close off the questioning. What is political in the perjorative sense is to decree that there are certain questions which cannot be asked, certain questions whose very asking makes you suspect, certain sacred beliefs to which you *must* subscribe or you will be drummed out of the club. This is not only unscientific, it is personally frightening. That is why each of us has had moments when we are faced with our own truth vs. a decreed truth. Those are the moments when we think: "Not yet, I'm only 22 and have my whole career ahead of me." Or, "I'm only 35 and I've got too much to lose right now"; or, "I'm 50 and soon I'll be retired and can say whatever I want." I am reminded of a book I read once about an Italian count who lay dying. The narrator of the story says about him that all his life he had felt he was destined to do something really important—so he had saved himself for that occasion, wanting to be ready. But the occasion never came along—and so he was dying without ever having used himself.

I am fortunate in having gotten through my fear barrier. I grew up in the Senator Joseph McCarthy era. When I went to college, you were afraid to join anything because someone might decide it was a Communist "front." You *never* spoke up, never rocked the boat for fear that if you did, you would not find work for the rest of your life. When I got involved, quite inadvertently, in testifying about food advertising in 1972, I was scared to death. I can only tell you, on the other side of that experience, that finding your voice is very empowering and very rewarding. It is nice not to have to worry about what "they" are going to say. But let this not be read as an attack on "the establishment" (whoever they are). For none of us is innocent. We are all guilty of reading carelessly, of not always getting our facts straight, and of not listening.

Earlier in my remarks I mentioned that people have in the past resigned from SNE for a variety of reasons. Until recently many of the people who resigned—or let their memberships lapse—were people who felt we weren't "doing anything anyway"; people who said that the Society for Nutrition Education was just like the other nutrition organizations that didn't have the guts or the desire to take on the issues which might bring them into conflict with the economic power of the largest industry in the United States. So at one point those "advocates" left SNE in large numbers, on the grounds that more could be

accomplished elsewhere. And of course, if everyone on one side leaves when *their friends* are not in power and if everyone on the other side leaves when *their friends* are not in power, then it is clear that we will no longer have an organization at all.

Surely we all have a right to hold those in power to the highest standards of objectivity and integrity; but those of us who are seen as questioning the status quo have an equal or perhaps even a greater obligation—both to heavy truth-seeking and to each other. I have seen some young graduates reach such a point of despair, such a point of frustration in regard to combatting the forces in the community which work against what they see as a rational, responsible food supply, that they, too, cease thinking and buy into the whole counterculture, uncritically. They test each other for levels of pure belief—just like the people they are opposing. They shut out information which does not fit their preconceived notions. They do not simply conclude, which would be *appropriate*, that science does not have all the answers. Rather they conclude that *all* truth lies in an irrational direction. They stop growing and become angry and militant and disenchanted all at the same time. They stop liking even each other. We have to learn to forgive each other. We have to listen to each other. We have to learn to overlook each other's irritating qualities. We have to speak to each other and help each other correct our errors.

In this regard, I am reminded of an article in *Ms.* magazine on women's problems with leadership. I was struck by the final paragraph. It was written by a woman who had become disenchanted with the feminist movement: "For me the moment of truth came when my morale was so hurt that I decided to resign from the movement. Then it occurred to me that I didn't know who to resign to . . . We are a community. What we are articulating isn't just our politics—it's our lives."

Last year at our annual meeting, Dr. Alfred Harper told us that the scientific method, as it is actually used by scientists, begins with a question. This year my message is that all the best questions have not yet been asked. We need a framework in which to put the pieces of information the scientists generate. How that framework looks, how the world fits together, what the world will look like tomorrow, how humanity will survive—all these are questions to which the world requires answers—answers to which we are all capable of contributing. But we must work together. The truth is hard to find. As we search for it in the darkness of bias, economic pressure, self-aggrandizement, and ignorant certainty, let's quit putting each others' candles out!

#### NOTE

This paper was adapted from the President's Opening Address to the Thirteenth Annual Meeting of the Society for Nutrition Education presented on July 6, 1980, in Montréal, Québec, Canada.