

FAT

OF THE LAND

Profits, politics & portion sizes:
Marion Nestle looks at why Americans are so overfed—
and so confused about what to eat

BY LAWRENCE LINDNER

ILLUSTRATION BY GREG NEWBOLD

IT'S THE SUMMER OF 1957. Ike is president, Elvis is "All Shook Up," and a serving of fries at the burger stand weighs in at two ounces, providing a relatively modest 200 calories. For an average adult, that's less than 9 percent of the daily requirement of about 2,250 calories.

Fast-forward 45 years. Today, the oh-so-cheap supersize packet of fries weighs in at over six ounces and 610 calories—more than triple the 1950s version and fully 27 percent of the complete daily caloric requirement for an average adult.

Americans, faced with an unprecedented surplus of food that translates into whopping servings at low prices, are eating it. Indeed, we are collectively cleaning our plates and rapidly becoming one of the fattest, unhealthiest modern cultures ever known. More than 60 percent of all adults in the U.S. are now considered overweight, and 27 percent are classified as obese. According to former Surgeon General David Satcher, we will soon see obesity eclipse smoking as a leading cause of preventable deaths in this country.

Who is to blame?

The food industry—whose job it is to sell all those extra calories—says that what you eat is up to you. Granted, the food industry spends more than \$30 billion a year to get you to buy its products, many of which do not fit easily into a healthful diet. But advertising doesn't force anyone to do anything, the argument goes; people buy what they want. Besides, even if ads do tempt, there's always our government to remind us of how to choose foods appropriately.

Sadly, Uncle Sam—no longer the lean, straight-talking icon of our memories—often remains mum about the efforts of food producers and purveyors. (Ironically, the reputed inspiration for the Uncle Sam character was one Sam Wilson, a businessman who supplied the government with barrels of beef during the War of 1812.)

Nutrition scientists and researchers, caught in the middle, are bracing for an epidemic of diabetes, heart disease, high blood pressure, stroke, gallbladder disease, osteoarthritis, some forms of cancer, and other obesity-related conditions.

Fry Inflation

1950-1970

Serving Size: **2 oz.**

Calories: **200**



1980s

Serving Size: **4 oz.**

Calories: **400**



2002

Serving Size: **6.1 oz.**

Calories: **610**



Enter Marion Nestle, an esteemed nutritionist with a Ph.D. in molecular biology, who is putting her career on the line to assign blame, name names and mount the public soapboxes to sound an urgent alarm about the food predicament facing this country. In her new book, *Food Politics: How the Food Industry Influences Nutrition and Health* (University of California Press, 2002), Nestle (pronounced NES-sel and no relation to the food conglomerate) peels away layer by layer the ways the food industry's influence reaches beyond the supermarket and television and magazine ads, infiltrating all ranks of government and touching nutrition researchers at the most respected academic institutions in the nation.

That influence, she points out, affects the tone and even the actual wording of all the official dietary advice Americans hear, coloring the way we *think* about food. It's why, for example, we are told to "choose a diet moderate in sugars" rather than simply to "consume fewer soft drinks, candy bars, cookies, cakes and other sweets."

The words "fewer" and "less" are anathema to those trying to sell food products. There are 3,800 calories produced for every man, woman and child in this country every single day—almost twice as many as most people need. And it's the food industry's job to sell those calories—getting us to eat more than is good for us. Thus, it spends a considerable amount of its vast resources to keep words like "fewer" out of the official lexicon.

As Chair of the Department of Nutrition and Food Studies at New York University, a one-time senior nutrition policy advisor in the Department of Health and Human Services, and a sometime-consultant to the food industry, Nestle is in a unique position to have seen firsthand how food purveyors, government and academicians end up as bedfellows when it comes to suggesting to people what and how much to eat.

Meeting with *EATING WELL* recently, Marion Nestle offered her perspectives on our eating habits and how they are manipulated by corporate food interests.

Q: People often assume that there is a firewall between the food industry and government, that the government sets guidelines for healthful eating regardless of whether those guidelines step on the toes of industry interests. But you argue in *Food Politics* that the food industry dictates, to a large extent, not just the content of their own ads and promotions but also of official, government-sanctioned dietary messages.

Can industry really dictate the eating advice given to the public by Washington?

MN: "Dictate" is probably too strong a word. I much prefer the word "influence."

Q: But just how can industry "influence"?

MN: One thing they do is "inform" people in government. That's what lobbyists are paid to do, and there isn't a single food product distributed nationally that isn't part of an organization that lobbies for it.

Q: Just what do lobbyists inform people in government of?

MN: That the science behind a message like "eat less meat" or "drink fewer sodas" isn't strong enough.

Well, the science is *never* strong enough. Think of salt, for instance. Every single official body or committee that looks at all the evidence that relates salt to high blood pressure comes out with the same result: that people would be healthier if they ate less salt. Yet anytime a paper comes out showing that salt might not have any effect on health, the Salt Institute makes sure that I have a copy of it in my office the next day. It's the same with the egg industry, the dairy industry—I could just go down the list of all of these trade organizations—they work really hard to make sure people know about the research that's favorable to their product. They don't do that with papers that show the opposite.

Q: How can putting forward such research influence people in government to create guidelines that are favorable to a particular industry if most of the evidence suggests something else? Can you elaborate?

MN: On the basis of this or that study taken out of the context of the accumulated body of research, a specific industry, say sugar, is able to go to the Department of Agriculture and say, "The scientific evidence doesn't support what your expert committee said should be a recommendation to limit sugar, and we want you to take the word *limit* out of there." And the Department of Agriculture, which has conflicting interests because it represents the food industry as well as the public, says, "Eh, who cares about a word? We'll change *limit* to *moderate*. What difference does it make?" And then the guideline becomes "Choose beverages and foods to moderate your intake of sugars."

Well, what does *that* mean? Nobody knows. Yes, on one level, everybody understands that it means less, but it's so euphemistic that it's hard to know. That's one of the things the dietary guidelines do. They talk in euphemisms that make people not understand what it is they're supposed to do with food. They talk about sugar, they talk about saturated fat, they talk about salt. They don't talk about soft drinks. They don't talk about beef. They don't talk about salty snacks.

Portion Politics

"EAT MORE" marketing methods extend beyond billboards and television commercials; they also include substantial increases in the sizes of food packages and restaurant portions. When the [USDA's *Food Guide*] *Pyramid* recommends 6 to 11 grain servings, these amounts seem impossibly large with reference to restaurant, fast, or take-out foods. The...numbers, however, refer to portion size *standards* defined by the USDA: A standard grain serving is one slice of white bread, one ounce of ready-to-eat cereals or muffins, or one-half cup of rice or pasta. Therefore, a single bakery muffin weighing 7 ounces, or one medium container of movie-theater popcorn (16 cups), easily meets or exceeds a day's grain allowances.

Larger servings of course contain more calories [and] can contribute to weight gain unless people compensate with diet and exercise. From an industry standpoint, larger portions make good marketing sense. The cost of food is low relative to labor and other factors that add value. Large portions attract customers who flock to all-you-can-eat restaurants and order double-scoop ice cream cones because the relative prices discourage the choice of smaller portions. It does not require much mathematical skill to understand that the larger portions of McDonald's french fries are a better buy than the "small" when they are 40% cheaper per ounce.

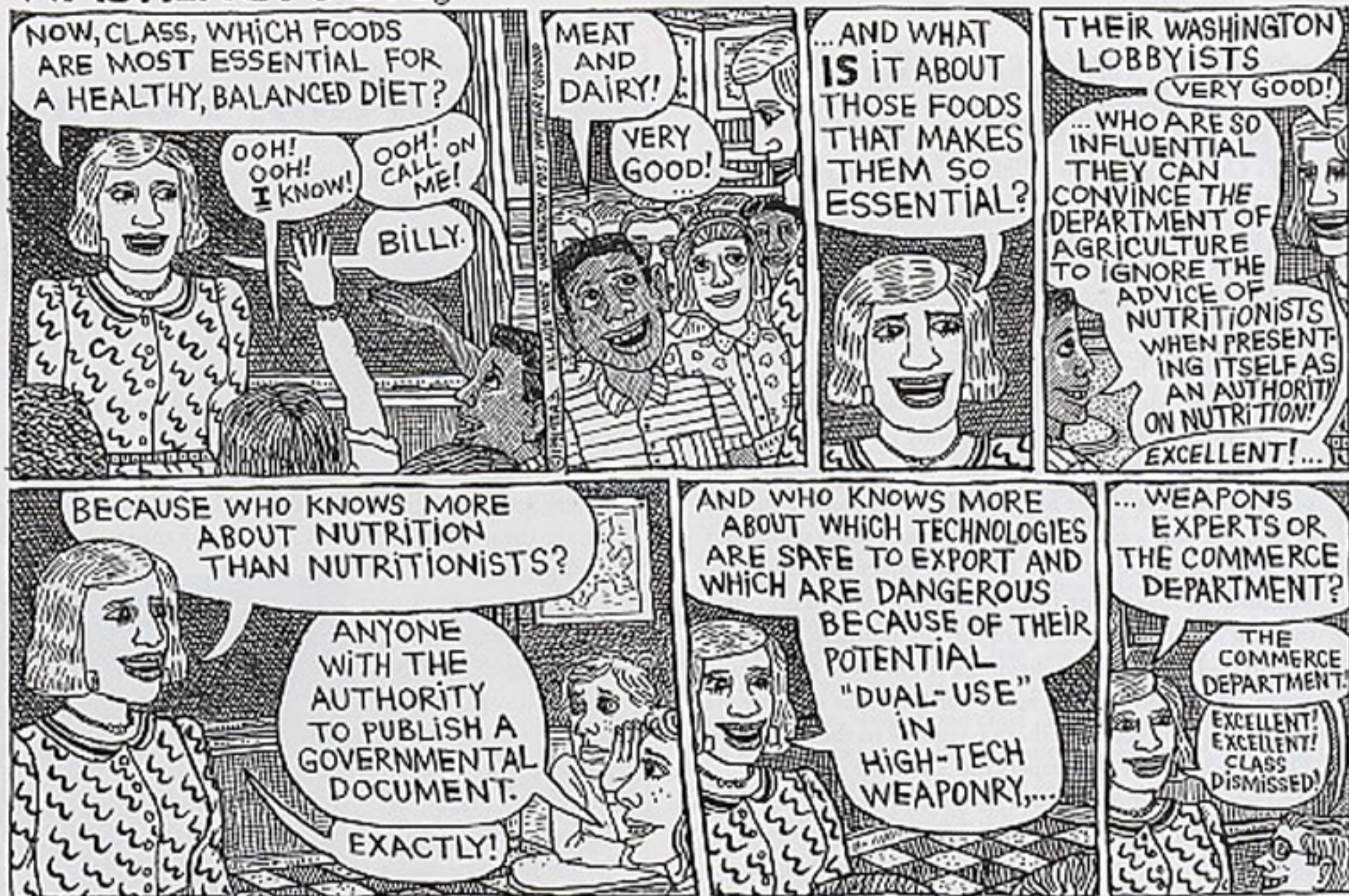
Taken together, advertising, convenience, larger portions, and...the added nutrients in foods otherwise high in fat, sugar, and salt all contribute to an environment that promotes "eat more." Because dietary advice affects sales, food companies also conduct systematic, pervasive, and unrelenting campaigns to convince government officials, health organizations, and nutrition professionals that their products are healthful or harmless and to ensure that federal *dietary guidelines*...will help promote sales.

—From *Food Politics*



Marion Nestle, author of *FOOD POLITICS*.

WASHINGTON



No government agency has been able to say "Eat less red meat" since 1979. The meat industry went berserk when that came out and said, "No, no, no! You're suggesting that people should eat less of our products!" And, of course, nobody wants to take on the cattlemen. They're very powerful in the states cattle are raised in. They're very aggressive in their protection of the industry. So instead, the government resorts to these complicated circumlocutions, like "choose a diet low in fat," and expects the public to reconstruct what that message means and what it has to do with meat and figure out how to act on it. You know, I talk to people all the time, and they're just hopelessly confused.

Q: What do you mean when you say that nobody wants to take on the cattlemen? The cattlemen may be able to *badger* people in government, but they don't really have any sway, do they?

MN: Food-industry lobbyists don't only make appointments to visit their congressmen. Each industry gives campaign contributions to those congressmen.

Q: And if they give money to a candidate running for office,

they expect favors in return once the person is voted in?

MN: It's an implied favor. There are many examples of companies being able to "encourage" their local congressmen to favor this or that piece of legislation.

Oftentimes, someone working in government, perhaps not a congressman but, say, an appointee in the Department of Agriculture, has a past career as a food lobbyist and vice versa, which makes things even easier for an industry trying to get its way. Last year, the new Secretary of Agriculture appointed a lobbyist for the National Cattlemen's Beef Association as her chief of staff, and the former secretary went to work for a law firm that lobbies for agriculture and food companies. It's hard to imagine a government worker fresh from the payroll of the beef industry acting completely unbiased by the beef industry's interests. Conversely, if you're part of the food industry, you would certainly like to have somebody with government experience working for you. One of the things that is becoming so difficult in nutrition is finding anybody who's at arm's length.

Q: But that's not true for the nutrition research community,

is it? Government may be bought and sold to some degree, but those who conduct studies to determine the most healthful way to eat are still acting independently, aren't they? And in doing so, aren't they influencing dietary behavior? After all, nutrition research makes it to the ears of those in government. It makes it to the media, where people can see for themselves what's what.

MM: It isn't possible to be a working nutritionist and not have relationships with food companies. There is a tremendous amount of industry-sponsored research. I have had no trouble at all finding recent papers sponsored by the maker of a specific product or commodity with results favorable to that product—no trouble at all. Journals have gotten increasingly embarrassed by instances in which papers they have printed turned out to be bought, which is why more of them are now requiring disclosure statements.

Researchers often say it's perfectly reasonable to get research money from industry as long as the company doesn't interfere. But it's almost impossible not to be interfered with.

Q: How do you respond to critics who charge that you, too, have been bought by industry and therefore contribute to its cause?

MM: It's not a situation I'm comfortable with. It's very difficult. My position, imperfect though it may be, is to not take on direct payments. I'll take payments for travel, but I don't take direct honoraria. I have them put into our department scholarship fund... [However], I think it can be argued—and *has* been argued—that that's just as bad as anything else. I'm certainly not trying to hold myself above anybody else. I struggle with it all the time.

If I were to have a really perfect stance on it, I would never take any money from food companies. I would never go to meetings that are sponsored by food companies. I wouldn't subscribe to journals that are sponsored by food companies. I wouldn't eat at food receptions that are sponsored by food companies, and I would work by myself in my office, and talk to myself in the mirror.

So this is my compromise. The only thing I can say in my favor is that I give it very serious thought and that I've worked out something that I can more or less live with. I hope other people will at least think about it. What I'm trying to do is raise the issue so that people can at least struggle with it, so that people who take money from industry don't just say, "What's wrong with it?" Because there *is* something wrong with it.

Q: You've pointed to the food industry as a sly influencer of the way the government and nutrition researchers view and

talk about diet. And the views of policymakers and scientists, in turn, trickle down to the public at large. But is the resulting message really so damaging? Is "choose a diet moderate in sugars" really so much worse than "consume less soda pop and other sweets"? Don't people get it?

MM: The wording makes it easier for people to get confused. And I'll ask the question, to whose advantage is it to have the public confused about nutrition?

You know, industry very strongly advocates the adage that there is no such thing as a good food or a bad food.

All foods are part of a healthful diet. The key is balance, variety and moderation. On the surface, that's true, but it's a cop-out. It's used to protect industry so that no one can say, "You shouldn't eat this, and you shouldn't eat that." That's the reason the Department of Agriculture's pyramid has been so controversial. It implies that some foods are

better to eat than others. Well, you *should* eat less of certain foods. I mean, that's the whole point of the pyramid.

Yet accompanying guidelines, like "choose a diet moderate in sugars," hide which foods to eat less of. There *are* foods that should be once-in-a-while things. Soda pop is the prototypical junk food, by which I mean a food that is high in calories and low in nutrients. But industry doesn't like "bad" food or "junk" food, because it sounds like you should eat less of it.

Q: OK, maybe those obfuscations have more power than meets the eye, but aren't there some arenas in which industry has actually taken on a true public-health role? Like with health claims, for instance?

MM: I think health claims are, by their very nature, extremely misleading. Kellogg's claimed that its All-Bran could contribute to colon-cancer prevention. Well, all of the recent research shows that fiber [abundant in bran] doesn't have much to do with colon cancer. It must be a dietary *pattern*. What the research shows is that foods eaten healthfully in a dietary *pattern* that's based on fruits, vegetables and whole grains, that doesn't have too many calories, that's accompanied by an active lifestyle, is protective against

“‘Choose a diet moderate in sugars’”
hides which foods to eat less of. There *are* foods that should be once-in-a-while things.”

“Eat Less, Move More”

What the U.S. Could Do

Education

- Mount a major, national campaign to promote [the theme of] “Eat Less, Move More.”
- Teach teachers about nutrition and weight management.
- In schools, ban commercials for foods of minimal nutritional value and teaching materials with corporate logos.
- End the sale in schools of soft drinks, candy bars, and other foods of minimal nutritional value.
- Require school meals to be consistent with [the USDA and USDHHS] *Dietary Guidelines*.
- Require daily opportunities for physical education and sports in schools.

Food Labeling & Advertising

- Require fast-food restaurants to provide nutrition information on packages and wrappers.
- Require containers for soft drinks and snacks to carry information about calorie, fat, or sugar content.
- Restrict television advertising of foods of minimal nutritional value; provide equal time for messages promoting “Eat Less, Move More.”
- Require print food advertisements to disclose calories.
- Prohibit misleading health claims in advertising and on package labels.

Health Care & Training

- Require health care training programs to teach nutrition and methods for counseling patients about diet, activity, and health.
- Sponsor research on environmental determinants of food choice.

Transportation & Urban Development

- Provide incentives for communities to develop parks and other venues for physical activity.
- Modify zoning requirements to encourage creation of sidewalks, pedestrian malls, and bicycle paths.

Taxes

- Levy city, state, or federal taxes on soft drinks and other “junk” foods to fund “Eat Less, Move More” campaigns.
- Subsidize the costs of fruits and vegetables, perhaps by raising the costs of selected foods of minimal nutritional value.

—from *Food Politics*

chronic diseases. To piece out one component of that is extremely misleading. It doesn't matter what the product is.

For example, Tropicana just got the FDA to approve a health claim for orange juice because of its potassium. You know, orange juice is great, but it's got 75 calories in 6 ounces. So if you're now going to drink orange juice, you have to eat 75 calories less of something else. But the health claim doesn't mention that.

So I think it's out of context. Health claims focus on single nutrients or single foods when it's the entire dietary pattern that seems to be associated with good health. Any time you tease out one particular nutrient or one particular food, you run into studies that are extremely contradictory, and it gets very confusing.

The media love stories like that. “Eat your fruits and vegetables”—that's not news. But the flip-flopping and the backtracking—the media pick up on that. So the public reads it and throws up its hands—“I can eat anything I want. They don't know what they're talking about, anyway.” And, of course, that serves the food industry too.

Q: So what *is* the nutrition message that's supposed to get out there?

MN: In this country, where so many people are overweight, it has to be “Eat less.” I don't care how you do it; if you're overweight, you've got to eat less—across the board. Trying to figure out these days whether it's saturated fat, unsaturated fat, omega-3 fats, trans-fatty acids—you could go crazy, when it's really simple.

Most of the diet should be plant foods: fruits, vegetables and whole grains. Meat and dairy in much smaller amounts and those processed things that are in the center aisles of supermarkets, even less. “Less” is a very unpopular message. It's unpopular with food producers, it's unpopular with eaters, it's unpopular with the government, it's unpopular with everybody.

Q: Have you ever tried to practice the “Eat less” message yourself?

MN: Yes. I have never been overweight, but it turns out I had high cholesterol. My doctor said that if I couldn't reduce it myself, he would strongly recommend that I start taking drugs, which I didn't want to do. So I lost 10 pounds. I had to go from 130 to 120 to get my cholesterol down. The first weekend was really rough, really rough. I was hungry. Also, I was “experiencing” my eating habits and having to change them. That was very difficult. I like food.

Q: What do you mean by “experiencing” your eating habits?

MN: You have to have a consciousness about what you're



According to Marion Nestle, soft-drink-themed toys like these convert children into unwitting advertisers and brand-loyal consumers.

eating. It requires a mindfulness. You have to stop eating when you may feel like having more. It's not easy. I would never say it's easy. You can never let down your guard if you live in a society like ours.

Q: It would seem that for most people, while the message has gotten out there about eating a better diet, about eating fewer calories, it has backfired. We're fatter, more people are getting diabetes...

MN: I don't think the message has backfired. I would argue that we've never gotten the message out in any clear way. And it's not just the way industry influences government, influences researchers. We're also overcome by \$30 billion a year of food marketing.

Q: But can mass advertising change the way we eat? It would be hard to imagine a lot of Coca-Cola ads convincing someone to have Coke for breakfast or to drink more Coke. People drink Coke if they feel like drinking Coke.

MN: Oh, yes. That's what everybody says. Go ask the advertisers. I've been reading *Advertising Age* for several years now. They believe beyond question that the amount of money and effort that's put into advertising sells products, and they can prove it. There are other kinds of marketing as well. In my own collection of marketing tools, I've got a Coca-Cola Barbie doll. So the mother who has bought that doll for her little girl has paid for that advertisement, right?

Q: But in the end, isn't it up to the individual to decide what to eat? After all, nobody's putting a gun to your head.

MN: Well, ultimately, of course, it's a personal responsibility. I call it voting with your fork. Every single time you buy food or eat in a restaurant or otherwise make a food choice, you're voting with your fork. But I think that willpower alone is not enough.

We know from research on personal behavior that food

choices are deeply influenced by the environment and the community in which people find themselves. In our environment, because of all the vested interests influencing government dietary policy, food is political. And as a political problem, it requires political solutions, not just willpower.

As just one example, soda manufacturers are allowed to develop contracts with schools whereby they install vending machines in return for money that the schools can use for discretionary purposes. It puts the schools in the position of being pushers because the contracts are usually tied to "performance" targets. The more soda pop the kids drink, the more money the schools get. If schools were better funded, which takes legislative action, then maybe they wouldn't be so quick to leap at the intense commercialism.


Now, you wouldn't let cigarettes into schools. I think we shouldn't let soft drinks into schools. That would seem to me to be a very, very good place to begin politically. Of course, something has also got to be done about campaign contributions so that legislators aren't so beholden to food companies.

Q: How do you begin to turn the tide?

MN: I remember those advertisements from when my kids were small, where there were kids and their parents, and the parents were smoking, and the kids were alarmed that the parents were doing something self-destructive. Those were the days when my friends who smoked used to have to hide in the bathroom to keep their kids from knowing that they were smoking. Well, the food industry is deliberately targeting marketing messages at kids. Why not target health messages at kids?

You suggested before that nutrition education hasn't worked—that it's backfired, that we're all fatter despite the health messages. But there has never been any money in nutrition education compared to the amount of money that's used to sell just one food product. Lay's, which is owned by PepsiCo, spends \$56 million a year to get people to eat their potato chips.

Q: You put cigarettes and soda pop and snack foods in the same category. But isn't it more complicated with food?

MN: It's *much* more complicated. With cigarettes, there's one product and one message: "Don't smoke." But there are 320,000 food products. And the message can't be "Don't eat." It has to be "Eat less" or "Eat this instead of that." 

Lawrence Lindner is the executive editor of the TUFTS UNIVERSITY HEALTH & NUTRITION LETTER. He is also a co-author, with Miriam E. Nelson, of STRONG WOMEN AND MEN BEAT ARTHRITIS (Putnam, 2002).