Many years ago, as I was beginning my formal study of nutrition, I spent a classroom break chatting with a new friend who was experienced in the field. I was in the process of learning more than I ever thought I wanted to know about vitamins and minerals, and told my friend that I had been thinking about nutrition education. I realized, I said, that it would take me about 20 minutes to teach ordinary people what they ought to eat if they wanted to be healthy: less meat, less fat, lots of grains and fruits and vegetables, some dairy. “The problem is that there are all those other things in the supermarket designed to confuse them.”

Probably I didn’t say it nearly so directly, but I distinctly remember that’s what I meant, that we had lost our ability to teach people how to eat because there were too many products on the shelves we had to teach them to avoid. And then I asked her, “Am I crazy?” She had been a practicing nutritionist for probably 20 years, and I counted on her experience to keep me from running off the tracks by thinking too much as we both headed—me from a background as a pre-med and a journalist—toward our doctoral degrees. And she said “No.” She thought what I said made sense.

But, of course, I went on to learn the Krebs cycle and other things I needed to know to pass muster as a nutritionist. And through the 70’s as GOOD NUTRITION became a fad, and even hit the front pages once in a while, I was proud of being able to go to parties and have people say with admiration, “Oh, you’re a nutritionist.” I would have felt even better had they asked for my advice; in fact they almost always wanted to tell me what supplements they were already using so I could give what they assumed would be my approval for their taking zinc, or high doses of beta-carotene, or whatever was then nutrient of the month.

Time passed. In the 90’s, a request from a Midwestern university for suggestions for how they might revise their nutrition department curriculum induced another troubling bout of thinking. I found myself asking the following: Given the ability of food processors to turn basic crops like wheat, corn and soy into a stream of raw materials for new products, can any old collection of fats, proteins, and carbohydrates, assembled in a vat and fortified with vitamins and minerals serve as raw material for our research and for our educational endeavors about food and health? Or would we insist that the resulting food product have some link to agriculture?

And if the goal of nutrition is not merely an increased store of abstract knowledge but the actual improvement of human well-being, I went on, didn’t we need to ask ourselves whether what was going on in the name of nutrition research was actually improving the lives of the people whom nutrition knowledge could most help? Since nobody had asked that, I took the liberty of speculating, ultimately concluding that the science of nutrition was probably no longer improving things.
Here’s how I came to that conclusion. For its first 40 years, from about 1912 until about 1952, nutrition demonstrably improved public well-being, perhaps even extended human life—through its discovery of the causes of, and the public health interventions to ameliorate, certain deficiency diseases. Those early discoveries are still helping people in poor countries where nutritional deficiencies may be widespread.

But in the United States, starting shortly after the end of World War II, the push to invent new products to maintain the growth of the food industry, and the emergence of television for promoting these tempting objects directly to the public, came together to create accelerating change in the food supply. The number of items introduced each year began to multiply at a rate that grew increasingly improbable. In 1991, the year before I gave my Midwestern advice, new food product introductions increased by 20% to 16,143. This meant that just over 44 new products a day arrived on supermarket shelves that year, effectively reducing to near zero the amount of time a consumer could devote to evaluating any single purchase, and rendering almost impossible the job of teaching simple rules for food selection other than "shop around the edges of the store."

It was my conclusion then—and nothing has happened since to change it—that the serious scientific questions about health introduced by this flow of new ingredients and novel processes into the marketplace have outpaced any progress we might have made in applying the science of nutrition. Our health statistics confirm this, suggesting that this nation is on a negative curve in terms of human well-being and longevity. Certainly we don't have the upper hand where weight control is concerned—although products aimed at that market proliferate like rabbits—and diabetes is out of control.

We know very little about the composition of these novel products we are consuming; we have no historical evidence of their safety or biological usefulness. So if the rates of certain degenerative diseases like cancer were to go up, we’d have no clue as to why; the speed with which novelty is introduced makes it impossible to analyze the effects of any innovation because there is no background of stable diets against which to examine it.

If we had known in 1940 what we know today about degenerative diseases in relation to the macronutrient composition of the diet, it would have been relatively simple to teach people how to choose their diets wisely from the foods then available in the marketplace. People had not lost their cooking skills. Food preparers—women and men I like to think—could have been taught to reduce saturated fat and sodium in the kitchen. And nutrition educators could have concentrated on finding and communicating quick and easy ways to prepare the unprocessed foods that were most of what was available in the marketplace.

Instead, those attempting to apply nutrition to the improvement of human well-being found themselves standing ankle-deep in a flood of new, often nutritionally-"fortified" products, desperately seeking to keep abreast of the latest news about the latest combination of ingredients that might make them and those they counsel chronically healthy. Meanwhile, extended trials with various of the nutrients, phytochemicals and combinations thereof, that are often added to
these products to make them appear healthy, have failed to show any significant effect on cancer, heart disease, bone health or any other endpoint.

What can ordinary eaters do in such an environment? The answer is really quite simple. Just eat food, not food products, not collections of nutrients, just food. I am happy to say that this conclusion—that we can’t live on nutrients—has gained some modest fame since, as Michael Pollan remarks in *In Defense of Food*, it was a speech of mine about just eating food that led him to think about the conflict between food and nutrients. Since he has a trumpet so much bigger than mine, I’m thrilled that he has broadcast into the world the idea that we should eat food, not nutrients, that we’ve been trapped in what he calls “nutritionism,” and that we’ve been led down a primrose path paved by regulators when they allowed food companies to pretend that processed products are real foods as long as they are “nutritionally equivalent” to the whole foods they are imitating. “Nutritionally equivalent,” of course, means nothing more than that the edible substances—whether nature-made or factory-made—contain roughly equivalent amounts of the nutritive substances *that we know about and have decided to pay attention to*, a stunningly inadequate assurance given our present, inevitably incomplete state of knowledge.

Meanwhile, in what can only be described as an ominous portent, food processors have begun to view the problem of hunger in poor “underdeveloped” nations as a sales opportunity. At a conference not long ago about the hunger problem, the idea that nutrient fortification of foods by multinational food companies would solve hunger problems was front and center. Yet in even the poorest of these countries, enough food is almost always available; people are most often hungry because they have no money to buy even ordinary foods—much less foods “enriched” by processing.

As the devastating statistics in our own “developed” nation indicate—the rising rates of obesity and diabetes, the forecasts that our children will have lives shorter than ours—we are threatening our and our children’s futures by how we feed them and allow them to be fed. We know just enough about the composition of food to know that, in seeking health, our only real choice is to eat actual foods, not those collections of nutrients that the food industry will be happy to provide to us in a variety of forms, even as candy bars. And if we don’t know any more what food is, it’s time to go down to the local farmers market and look around.

*Joan Dye Gussow is an author, serious food grower, and Professor Emeriti of Nutrition and Education at Teachers College, Columbia University She is a member of the KIDS Advisory Board. Her new book Growing, Older, published by Chelsea Green is available at booksellers everywhere. Joan Dye Gussow may be contacted at jeg30@columbia.edu.*