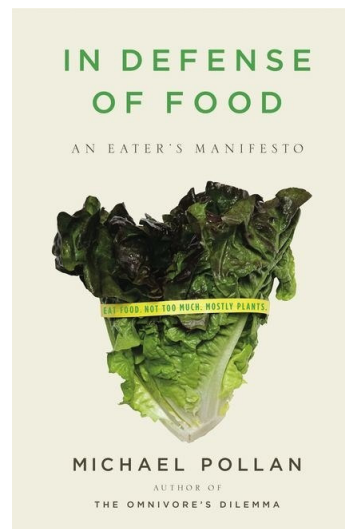


## Nutrition, Aging and Food

I've wanted to write an email about nutrition for a while but I was so busy learning new things myself that I wasn't sure what to emphasize. I was in the process of starting a second book: *Stupid Reasons People Age*, when a patient, Roger, with whom I share books, gifted me several books on the subject of nutrition science, one of which is officially my favorite non-fiction book of the past ten years. *The Omnivore's Dilemma*, by Michael Pollan introduced me to an author who is not selling any miracle diets, who is not a specialist in nutrition or medicine but who, as a Knight Professor of Science and Environmental Journalism at the University of California at Berkeley, has taken a fresh, and in my opinion, a balanced and scientifically valid look at everything we know and *what we do not know* about nutrition.

The good news is that now I do not need to write the darn thing! His latest book, *In Defense of Food* takes a closer look at the health of the individual – that's you – in part as a function of the ages of interaction between fresh whole foods and your genetics. He covers a lot of that I wanted to share and more, and he does so with greater skill, research and honest balance than I would have likely employed. (Relief.)



Here's the point. We have long known about certain essential aspects of nutrition. It's *what we don't know*, and therefore don't take into account, that gets us into trouble. For example, in the late 1800's, scientists invented the first infant formula. They knew it provided everything a child *was known to need*. That was the problem. We only *knew* about proteins, carbohydrates and fats. Unfortunately, we had not yet learned about little things like vitamins and minerals. That didn't stop those baby's bodies from needing them, however, and of course they did not do very well. Later when they thought butter might not be so healthy they invented margarine to "improve" it. History is filled with such dietary faux pas, but we never learn because it is not in our nature to account for things we haven't yet even conceived of.

Now, long after the discovery of enzyme cofactors such as vitamins and minerals, even since the discovery of Omega 3 fatty acids (the essential elements most recently left out of baby formulas from a few decades ago) we have learned of a whole new class of nutrition molecules. These aren't molecule to burn for energy, not molecules to use as raw building blocks for teeth, muscles or brains, not cofactors for enzymes like vitamins and minerals, but molecules used to *deliver information* about our outside world to our inside world.

Who would have thought that berry pigments tell our cells that it's not only spring or summer but that there is no drought and that it is safe to rev up our metabolism to repair chronic damage, to burn fat, to create our own anti-oxidant enzymes, etc. A compound

found only in young spring leaves (6MBOA) is required for many species of mammals to reproduce! A dearth of spring leaves would mean there's not enough food to raise offspring – probably better to mate another time.

Now enter the Standard American Diet (abbreviated SAD) and we have a multibillion dollar industry devoted to influencing our food choices toward scientifically “improved” food-like products.

The fact is, medicine's double-blind, placebo-controlled gold standard remains impotent, at least at present, to advance our knowledge in nutrition very effectively. A given proven cuisine, perhaps handed down for thousands of years is more like a symphony to our bodies than just a collection of individual “nutrients.” And like a symphony, it would be ludicrous to argue over which instrument matters the most or whether removing all the C-sharps or B-flats would be a better call.



**Author/Eater:  
Michael Pollan**

The symphony our body was designed to hear came from dining on hundreds of different whole plants, each with thousands of unique compounds. The scientific sorting of our food's varied “signals” is way beyond our current ability – but not beyond that of our bodies. These two old friends, eater and eaten, have been working together for ages.

Mr. Pollan clearly guides his reader down a common-sense analysis of where we stand with nutrition and provides such simple, do-able advice that there remains no excuse for not improving your health with better nutrition and a happier relationship to your meals.

“Eat *food*, not too much, mostly plants.” “Don't buy anything with a health claim on the label” “Don't buy things that no one's great grandmother could recognize.” “Make meat more of a side dish than the main event.” And there are many more.

I hope you will pick up a copy of *In Defense of Food* at the store or at the library and that you'll enjoy the read half as much as I did. And then, if you want to know more, read his earlier book, *The Omnivore's Dilemma* (a masterpiece in my opinion) which brilliantly covers the issues of our modern food supply and how our eating choices can hurt or help the oil crisis, increase or decrease greenhouse gases, degrade or help return our soils to the healthy ecosystems we need them to be if we are to stop the health decline in our nation and in the world.

