
Real Food Nutrition & Health

**a renegade look at nutrition based on a diet of whole,
organic, and local foods grown, prepared, and eaten
according to traditional food ways**

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Information contained herein is meant to motivate you to make your own health care and dietary decisions based upon your own research and in partnership with your health care provider. It should not be relied upon to determine dietary changes, a medical diagnosis or courses of treatment.

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Chapter 1

Food, Not Nutrients

The title of a 2007 article in the journal *Nutrition Reviews* says it all: “Food, Not Nutrients, Is The Fundamental Unit In Nutrition.”

We need to shift our focus away from “nutrients” and towards “food” in order to understand the effects nutrition has on health. Why? Because whole foods are so much more complex than nutritional science can understand.

Take, for example, the lowly carrot. We all know that eating carrots can improve eyesight. Not long ago, nutrition scientists believed that this was because of the beta-carotene in the carrot. So, they did what any nutrition scientist was bound to do. They experimented.

They removed the beta-carotene from the carrot and gave it to test subjects. And you know what happened, don't you?

Was their eyesight improved?

No!

DEFINITION

nutrient: any substance that can be used by your body to give you energy and build tissue

Now nutrition scientists are back to square one. As quickly as they isolate a particular nutrient (like beta-carotene) and declare it the new wonder, they discover that nutrients don't work in isolation.

Carrots are great for your eyes. There's no denying that. But it's the *whole* carrot that conveys the benefit, not any particular nutrient within it. By focusing on the beta-carotene in carrots, nutrition scientists fell prey to nutritionism.

What Is Nutritionism?

Coined by Georgy Scrinis and popularized by the food journalist Michael Pollan, the term **nutritionism** refers to an ideology that believes it is the scientifically identified nutrients in foods that give them their nutritional value. You've got to admit, it's pretty tempting.

It's tempting to think that we know everything there is to know about particular foods, that science can tell us just *why* particular foods are healthy to eat and why other foods are dangerous to eat.

DEFINITION

nutritionism: *an ideology that believes it is the scientifically identified nutrients in foods that give them their nutritional value.*

It's so tempting, in fact, that it's what we Americans have been doing for the last few decades. Yet rather than giving us the answers we were hoping for, nutritionism has given us nothing but confusion. As particular nutrients fall in and out of popularity, foods which contain them go from being glorified to demonized to glorified. You don't have to look far to find examples. First eggs were good for you because they're such an amazing source of complete protein and rich in essential fatty acids and vitamins; then they were bad for you because they contain cholesterol. When we thought dietary cholesterol was the cause of heart disease (a now thoroughly outdated scientific concept), we told people to avoid the egg yolks and eat only the whites. New products sprang up on the market – fake eggs, eggs with their yolks removed, you name it. People began making and ordering egg white omelets and feeling like their decisions were “heart healthy.” Now nutritionists are once again in love with the egg, and ironically it's the yolks that are the new heroes.

Perhaps the greatest nutritional foible of the past few decades has been the promotion of margarine. Not long ago, we were taught that margarine (a synthetic butter substitute made

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of processed vegetable oils) was healthier than butter because it was lower in saturated fat. Twenty years later, we learned that the hydrogenation of the vegetable oils necessary to make margarine was in fact creating lethal trans fats. Trans fats are now implicated as a leading cause of heart disease.

Oh, the irony! Everyone had rushed to buy margarine thinking it would help *prevent* heart disease, when in fact the trans fats in the margarine were a leading *cause* of heart disease. Dale E. Bauman, a professor of nutritional biochemistry at Cornell University has said, “In hindsight the American Medical Association’s recommendation that caused people to stop eating butter and switch to margarine (high trans fatty acids) was tragic given our current knowledge of the clear and substantial health risks from consuming industrial trans fats.” Of course, thanks to the wonders of food science, as soon as we learned that trans fats were so evil, margarine manufacturers figured out how to remove the demonized nutrient.

And therein lies the rub.

Focusing too narrowly on nutrients has obscured the true value of eating real food. As Michael Pollan argued in his latest

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book, *In Defense of Food*, **nutritionism** is a boon to Industrialized Food:

*“No idea could be more sympathetic to manufacturers of processed foods, which surely explains why they have been so happy to jump on the nutritionism bandwagon. Indeed, nutritionism supplies the ultimate justification for processing food by **implying that with a judicious application of food science, fake foods can be made even more nutritious than the real thing.**”*

In the opening chapter of her newest book (*Real Food For Mother And Baby*), Nina Planck makes a similar point:

“Nutritionism has been good for the food companies and supplement sellers ready to profit from government-approved health claims. Orange juice with added calcium and chocolate with added probiotics would not exist if not for the nearly universal acceptance of nutritionism. But it has not been noticeably good for our health....”

DEFINITION

industrialized food: *the food produced by what's often called the “Big Food” industry via industrial farming or food manufacturing operations. According to Joel Salatin – a self-described Christian, libertarian, environmentalist, lunatic farmer and hero of the sustainable food movement – the goal of*

Look at it this way. When you buy an organic vegetable or fruit, the person who ultimately profits is the farmer who grew it. But what happens when you buy a product rather than produce?

Let's say you buy a loaf of bread. Sure a farmer grew the grain, but after the grain was harvested a whole lot of other stuff happened. First, a grain wholesaler bought the grain. Then a flour manufacturer bought the grain from the wholesaler. After the grain had been milled into flour, a bread maker bought the flour. The bread maker turned the flour into bread, which he then packaged and sold to a distributor. The distributor then shipped it across the country to your grocery store.

Everybody in this process has expenses which get passed down to you, the consumer. You may pay \$3 for that loaf of bread, but most of that money goes to the grocer, the distributor, the bread maker, the miller, and the wholesaler. Only a penny or two makes its way to the farmers.

The food manufacturers added value to the grain by turning it into bread, and by doing so, they turn a profit. The more perceived value they can add to a product without dramatically increasing their costs, the higher their profits.

industrialized animal farming is to make the animal bigger, fatter, faster, cheaper. While romanticizing efficiency, the industrial food model unwittingly sacrifices the integrity of our food, fundamentally changing it into something else. Tomatoes may look the same as they did fifty years ago, but they are fundamentally different fruits.

And so, food science is born. It's a way for food manufacturers to add “value” to food. In our era of rising obesity rates and soaring health care costs, there is a lot of perceived value if you can market your food product as being “healthy.” That's why industrial food producers have been quick to jump on the nutritionism bandwagon. By taking our attention off of the fact that they're trying to sell us adulterated, unnatural, and fake foods and instead drawing our attention to their nutrient rich health claims, food manufacturers stand to make huge amounts of money.

Just how much money are they making? According to Paul Roberts in *The End of Food*, our food system was generating 4,000 calories per person per day in the year 2000 (probably even more today), up from 3,100 calories in 1950. The average woman only needs around 2,000 calories a day, and the average man only 2,500 calories per day. This means people are consuming too much food, particularly highly-processed types which are extraordinarily calorie dense. On that point, Mr. Roberts cites that for every 100 calorie reduction in the American diet, industrial food companies will lose over \$30 billion dollars

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per year. If we were to reset calories at 1950 levels, **industrial food would lose over a quarter trillion dollars every year**. Now, compound that with consumers choosing to eat less processed, industrialized food and more real food, and you get a recipe for huge financial losses. No wonder the food industry has been so quick to embrace nutritionism!

Nina Planck explains just how ridiculous nutritionism can be if we jump on board and start talking about nutrients rather than food:

“However, you don’t have to count calories, grams of saturated fat, milligrams of vitamin E, micrograms of folic acid, or jillibeters of anything else. I never do. It would be downright wacky to create shopping lists of nutrients. (“Sweetheart, I’m pregnant! Don’t forget complex carbohydrates, lauric acid, and betanine.”) As a nutrition geek, I have a basic understanding of the major nutrients and a few minor ones, but I am still firmly in favor of the tangible material formerly known as food. In our house we call it real food. It’s good for you. It’s good for babies. It’s good for everybody.”

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A Return To Food Traditions

Why should we focus on whole foods as they've traditionally been eaten? Because if the scientific study of nutrition has taught us anything, it's that whole, real foods have a complex relationship of nutrients both within themselves (a carrot is more than beta-carotene, a tomato more than lycopene) and with the other foods we serve them with. Nina makes this point in Chapter Two of *Real Food For Mother and Baby* — The Fertility Diet:

*“Another reason to eat whole foods is that many nutrients work together. Sperm health improves dramatically when vitamins A and E are eaten together, probably because E prevents oxidation of A. You need vitamin C to absorb iron, and saturated fats extend the use of omega-3 fats. There are countless relationships like this in nutrition. **There is no need to remember them. Just eat whole foods in their natural state and in classic combinations, such as leaves with olive oil, or fish with butter, and you'll get everything you need.**”*

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I couldn't agree more. Even though I study nutrition and am forced to speak about the wonders of certain foods in terms of nutrients, I don't want any of you to get the wrong idea. Although I'm glad that nutritional science can help me understand exactly *why* coconut oil is a great fat, or *why* grass-fed beef is a healthy food choice, that's not why I eat these foods. I eat these foods because they're Real Food (and they taste great). I loved how Nina Planck defines **Real Food**:

"It's old and it's traditional."

So simple, really! This is food that your great grandmother would have recognized as food. This is food that has been eaten or prepared this way for hundreds, if not thousands of years.

Choosing Real Food is empowering. Rather than relying on nutrition experts to tell us what foods are healthy, we can apply a simple test to know whether or not a food is good for us. We just need to ask ourselves if the food is Real. Is it old? Is this how it was traditionally prepared and eaten?

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Real Food Nutrition

A typical nutrition textbook is arranged around the primary macro-nutrients: fats, proteins, and carbohydrates. While I believe it's important to understand nutrition, I believe it's more important to be able to make healthy food choices. That's why this book isn't organized around nutrients, but rather foods.

Don't worry, you'll still learn about the major nutrients and how our bodies use them. But organizing this book this way is my own small attempt to reduce the temptation to think in terms of nutritionism.

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