

How Important Is Nutrition, Really?

FEW PARENTS START OUT WITH THE GOAL of feeding their children toaster pastries for breakfast and peanut butter crackers for lunch, yet an astonishing number (if my practice is any indication) end up there. How many exactly? Hard to say, because so many of them are hiding in shame. These are not uneducated people. They are doctors, lawyers, and professionals. One high-powered executive with a master's degree in business came to speak to me about her son whose diet consisted almost entirely of candy bars and pretzels. He was, no surprise, not functioning in school or at home, and the many medications they had tried were not working. She felt so guilty and was so defensive that I could not find a neutral area where we could have a conversation about how to help him. She heard every suggestion, no matter how mild, as a referendum on her mothering skills. "He won't do it!" she insisted. "I have tried."

The scenario of a typical diet gone bad starts at age two when a sleep-starved mother hands her red-faced, screaming toddler a cracker or cookie so he will just shut up. The action is not seen as a long-term

solution but a rare treat for a bad day. But little crackers and cookies work like a charm for toddlers. They melt in the mouth, can be held in the hand (for maximum control)—they are like toddler crack. The baby is happy! He stopped fussing at church. At Grandma's birthday party everyone remarked on how well behaved he was.

Yes, he refused to eat lunch, but that was a special occasion, and aren't all toddlers picky? *No, they are not.* If you give them only the good food you want them to eat, they will eat good food. However, once salty or sweet food is introduced and the child is at an age when it's developmentally appropriate to assume some control over what he puts in his mouth, then a bad habit will unwittingly begin, and things will go downhill from there. If the snack food is in the house, the child quickly learns that he can refuse dinner and scream until the preferred food appears. Few of us have the energy or patience at six-thirty at night to deal with a hysterical child. Besides, the rest of the family is trying to eat dinner, and isn't it better for the baby to eat something—even if it is junky—than nothing? A good mother does not let her child go hungry, right?

The final mental argument is that fighting about food causes eating disorders. Isn't this back-and-forth arguing about what to eat harmful to a child? This is how good moms and dads, under the guise of not letting their child go hungry and avoiding food fights, lay the foundation for bad eating. The two-year-old, under the chemical influence of highly flavored food and heady with newfound personal power, self-selects his own diet from this time forward.

Radical solution: Don't have anything in the house you do not want your child to eat.

NUTRITION TO THE RESCUE

If there is one idea I want you to take away from this book, it's this: Nutrition is important. Not only does it help your child's brain and body develop to his optimal potential, but it enables your child to live a healthy life, maximizing energy and minimizing illness. Perhaps you

accept as a fact that all kids get sick. Perhaps you've been led to believe that conditions such as reflux, ear infections, stomachaches, moodiness, difficulty controlling behavior, and learning problems are all "normal"—and in no way impair how children grow and learn.

You are about to discover that many of these so-called common childhood ailments are indeed avoidable or can be dealt with nutritionally before they disrupt proper development or lead to more complex medical problems. Now you may be wondering, "Is this one of those books that recommends mustard packs for stomachaches or makes you feel bad for not raising your own chickens?" Absolutely not. It is a book that will take you on an important journey. I will show you how to take the concept we all know, "You are what you eat," and use it to make simple dietary adjustments that can make your child happier, healthier, and generally easier to live with. Furthermore, this trip will be entertaining and interesting.

For the scientifically oriented, there will be supportive studies and data to prove I am not making this all up. What surprises me most after more than twenty-five years as a practicing nutrition detective is not the lack of information (though more is always needed) but the limited way nutrition science is turned into usable information. I am committed to changing that deficiency.

WHERE I COME FROM

I always like to know where an author I'm reading or specialist I'm working with is coming from. A good detective understands her own prejudices as well as those of her resources. I was born on a mayonnaise farm. Just kidding. That is an old joke in my family. You would have to go back a few generations to hit a farmer in my family, but you would not have to travel far to see the Pennsylvania Dutch influence. Both my mother and father could speak the language of the Amish, and my grandparents spoke it around us when they did not want us to know something. My fondest memories of my grandmother are of her digging

up dandelions for dandelion salad (with bacon grease dressing) or frying doughnuts for Fastnacht Day. (Fastnacht Day is the day before Lent and in the Pennsylvania Dutch tradition is an excuse to make potato doughnuts. There was no religious component.)

My parents did not have a speck of old country in them, particularly my mother, who would sooner have gallbladder surgery than fry a doughnut. In fact, my mother wanted as little to do with food as possible. Her favorite cookbook was Peggy Bracken's *I Hate to Cook Book* (which was just reissued for its fiftieth anniversary). She frequently lamented that cooking and eating were a big waste of time. Her goal was to spend as little time as possible thinking about and preparing food, and she succeeded spectacularly. Our regular diet was pretty much made up of dried-out meat, potatoes, and canned vegetables. Like my mother, I hadn't given food very much thought. I just assumed that everybody ate potatoes five nights a week.

But there was an irony in my mother's lackluster relationship to food and cooking: She was more confident about nutrition than most parents are today. Fruit was good (and easy), but soda was only for special occasions. McDonald's (the only fast-food establishment around when I was young) was always to be avoided. Packaged cookies were not good for you, but eating ice cream every day was okay. (Ice cream was a major food group at our house and one of the few premade foods condoned because it was from cows and therefore nutritious.)

As soon as I turned sixteen and could drive, my household chore became doing the food shopping. Still, I did not become interested in nutrition until I went to college. I was home visiting and doing the food shopping (naturally) when I stumbled upon a book called *Sugar Blues* by William Duffy. It was a book written in the 1970s about how sugar was as addicting as cocaine and almost as bad for you. He advocated giving up refined sugar as a way to improve overall health.

This was a revolutionary idea, and I was at just the right time and age to grab on to it with vigor. Out went the sugar from my diet, and although I was always slender, I lost five pounds and my skin cleared up.

I looked and felt better than I ever had. Within a short period of time, I had shifted majors and changed universities and was on my way to changing people's lives with nutrition.

Unfortunately, neither college nor grad school taught me how to apply nutritional science to people's lives; in fact, it became immediately clear that there was a primary disconnect in the field of clinical nutrition. Although there is endless talk about how important nutrition is, in practice, most of my professors rarely acted like it was that significant. Sure, if a person is obese or severely underweight or diabetic, a dietitian is called in. Otherwise, nutrition, although always stressed as important, is given only cursory consideration in the medical field. Those of us who believed more could be done with nutrition ended up working at health food stores or were labeled extremists.

Every field has its quirks, and in nutrition it is this lack of practical application of what we know about nutritional science. For example, any basic nutrition text will tell you that a primary symptom of zinc deficiency is poor growth. Yet in twenty-five years, I have never seen a regular pediatrician or endocrinologist test the blood-zinc levels of a child whose diagnosis is failure to thrive. Hormone levels and bone age will be evaluated but not zinc. The doctors are usually well trained and know zinc is necessary for growth hormone production. In many cases the parent will be distressed about the child's poor diet (a further hint that nutrition may be a factor), and still the test has not been run.

This does not make sense to me. One basic law of physics says that you cannot make matter from nothing. You have to start with something. In the case of the body, its ability to create must start from what it takes in or is born with. In other words, any growing, healing, development, and functioning you accomplish must evolve from what you come with, eat, drink, or breathe. You are born with about seven pounds of matter

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that will expand into a hundred-some pounds of higher-functioning substance. Because food makes up a vast majority of the base matter that will be turned into more complex matter (i.e., you as an adult), nutrition should by definition have the capacity to affect a good number of processes. And it does. What one eats has bearing on mood, energy, susceptibility to illness, digestion, sleep, learning, healing capacity, and more. We just do not access nutrition's full healing potential.

WHAT THE SCIENCE SAYS ABOUT NUTRITION

Most people are surprised when they discover how much nutrition affects the everyday health problems all of us face with our children. Does eating a peanut butter sandwich for breakfast rather than a toaster pastry have the power to turn that C in Spanish to a B? Can a child's behavioral problems stem from just being a picky eater? Mom may have told you to eat your vegetables growing up, but how much can eating a few zucchini slices really affect recurring ear infections? The answer is, more than most parents and physicians realize, but not exactly in the way you think.

Most people and most scientific studies look at nutrition in a narrow and reductionist way. People want to see big improvements as a result of one distinct change somehow isolated from the complexity of normal eating and living, while assuming (or pretending) we have correctly identified all the other influencing factors. A classic example of how difficult it is to make any practical decisions with this thinking model is the breakfast studies.

Let's put a very basic nutrition question to the test: Is eating breakfast a good idea? Use your practical experience and answer this question in your mind, because by the time you finish hearing about the scientific studies, you may not even be sure what breakfast is. In science, we need to reduce that question to a narrower concept that can be measured. Therefore, it's not specific enough to ask whether or not eating breakfast

is a good idea. We need to know first *who* the potential breakfast eaters are and *what* they are actually eating for breakfast, and then figure out a reliable *measurement* for monitoring the benefits of eating breakfast.

Different studies focus on different aspects of these questions. The focus depends on who is doing the study and, more important, who is paying for it. I like to think of breakfast as the way to jump-start the day by giving your child's body the best possible fuel in the morning when they most need it for energy and learning. My question would be: Will a particular breakfast make your child feel energetic and able to perform well at academic tasks? Let's see what the studies discovered.

One found that eating breakfast regularly significantly reduced stress and depression. That makes sense. It's logical to conclude that starting the day with good food makes a person feel more energetic and better able to cope with stress. But wait . . . The study, funded by a cereal manufacturer, did not prove that you would be brighter eyed and bushier tailed if you *switched* from not eating breakfast to eating breakfast. The study found only that people who ate any breakfast at all

THE NUMBER OF CHILDREN WITH CHRONIC HEALTH CONDITIONS IS INCREASING

According to the American Medical Association, obesity, asthma, behavior and learning problems, and other chronic health conditions increased 14 percent in children between 1994 and 2006. For a health condition to be considered chronic, activities and schooling had to be limited, or medicine, special equipment, or specialized health services had to be required for at least twelve months.

Here are a few more thought-provoking facts from the Centers for Disease Control and Prevention and the U.S. Department of Health and Human Services:

- Five percent of children age five to eleven years missed eleven or more days of school over the last year because of illness or injury.
 - Four percent of children under eighteen years of age have food allergies.
 - The incidence of food allergies increased 8 percent between 1997 and 2007 in children under age eighteen.
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COULD IT BE HIS DIET?

realize this list seems long, but all of the issues below can have a nutritional component. If your child is suffering from any of them, examine his diet and consult with a health care practitioner who understands the impact of nutrition on health and well-being.

- autism
- aggression
- allergies
- anxiety
- bad breath
- behavioral issues (including oppositional defiant disorder)
- chewing on clothing or other objects
- clumsiness
- colic
- constipation
- depression
- developmental delays
- diarrhea
- ear infections
- eating disorders
- eczema
- failure to thrive
- frequent illness
- gassiness/bloating
- genital itching (technically known as hands down the pants)
- hives
- hoarse voice
- joint pain
- learning disabilities
- moodiness
- overtiredness
- pica (eating of nonfood items)
- picky eating
- poor healing of wounds
- rashes
- reflux
- seizures
- sensory processing disorder
- sinus infections
- sleep problems
- small stature
- speech delays
- temper tantrums
- tummy aches
- vomiting

tended to feel less stressed and depressed. Maybe, one critic remarked, eating breakfast is just something that happier people do.

If you look at the problem from another angle, you might pose this question: Does it matter if you eat a turkey burger versus a sugary cereal for breakfast? This is a tough, tough question because turkey burger manufacturers have never funded a breakfast study. Cereal manufacturers fund breakfast studies, so the nutrition question has been reduced to whether people who eat Cocoa Puffs versus no breakfast are happier. (Or perhaps happier people eat Cocoa Puffs.)

Certainly, eating breakfast should make students perform better, right? If the child lives in poverty and is malnourished, eating anything in the morning probably makes some difference. But the study results are not as obvious if the child is not starving. Of course, children in higher-income households eat breakfast more often than kids in poorer households and may be getting higher-quality food at other times plus extra tutoring after school, further muddying the breakfast effect. One study discovered that having cereal for breakfast helped school performance compared with having no breakfast. (You can see this one quoted on television commercials, but the results are slightly twisted so that a cereal breakfast appears to be a superior meal rather than just being superior to no food at all.) “There is a lack of research comparing breakfast type, precluding recommendations for the size and composition of an optimal breakfast for children’s cognitive function,” one researcher lamented. Personally, I am a big fan of eating dinner foods in the morning, but sadly there is no scientific literature documenting the benefits of fish and rice for breakfast.

It turns out that children who eat breakfast tend to be in better nutritional shape to start with and tend to be less overweight. Academic performance definitely goes up when school breakfast programs are put in place, but children also tend to show up for school more often when there is free breakfast, and showing up at school is definitely associated with doing better. The narrow focus of the studies has reduced the application of the results to the funding of school breakfast programs in low-income areas and the marketing of breakfast cereal. Although funding school breakfast programs is a just and worthy cause, none of these studies argues convincingly that a child with access to food would benefit from eating protein for breakfast. We know only that eating breakfast is preferable to being hungry in the morning.

If the most basic nutrition question like this one about breakfast leads to these lackluster findings with limited general application, it’s no wonder we lack confidence in our ability to wield the science of nutrition. We constantly give lip service to the idea of diet being important

to behavior, growth, and development, but as soon as there is an illness or symptom, medicine is in and nutrition is out. Using a reductionist study model, it's much simpler to test a drug's effectiveness for a certain symptom of disease. Drugs by definition tend to have a specific mode of action, and one pill (versus endless varieties of breakfast, for example) is being studied. Nutrients have a broad spectrum of effects and work in conjunction with other nutrients in a weblike fashion. We know from experience and studies that good nutrition is important for fighting illness, proper growth and development, and optimal learning, but linking one specific condition to one specific nutrient is the exception rather than the rule. Often you are looking at a bigger nutritional picture with several moving parts.

I want to change how we think about chronic conditions, especially those affecting the brain, immune system, and digestive tract. Why not start with the child's personal chemistry, which dictates how his body and brain function? After all, you have enormous influence over the raw materials going into the biochemical soup that is your unique and wonderful child. And, if the first rule of medicine is to do no harm, then the dinner table versus the pharmacy counter is the place to start. What I've studied, witnessed, and tested again and again is that nutrition is a way to tweak a child's personal chemistry for optimal health.

IN A PERFECT WORLD . . .

The foundations of a good diet are simple: whole organic food, lots of fruits and vegetables. Getting this far is already a challenge for most parents because of widespread picky eating problems, which is why the very first nutritional issue to be tackled is the fussy eater. Beyond the basics, most nutritional problems fall into one of two areas: Something being consumed is irritating or something that the body needs is missing. All of the interventions for the health and development problems that follow fall into one of those categories.

In a perfect world, we would not be solving nutrition problems but preventing them. To this end, I am a strong advocate of eating good, healthy food, of course, and also of using nutritional supplements. Supplements close the gap between the ideal and the real, and are insurance against the ravages of modern living. In addition, they can optimize genetic potential in a way that diet alone cannot unless you are willing to make the diet the main focus of your life, and even then, it would be difficult.

One of my dreams is that we as a culture would support healthy eating. In my fantasy utopian nutritional world (cue birds chirping and harp music), farming would make a comeback as a noble and desirable profession.

Some of the brightest and most enterprising children when asked what they want to be when they grow up would say proudly, "A farmer." Their adoring parents would beam with the same pride most parents currently reserve for the answers "astronaut" or "investment banker."

I start with a farming renaissance because it is hard to respect the power of food if one does not respect the farmer. In our culture, respect follows income. Therefore farmers would have to make a reasonable living, which means the average person would expect to pay a higher percentage of their income for decent, safe food. The result might mean that we'd have slightly fewer pairs of shoes in our closet and perhaps fewer electronic gadgets, but we'd have more wholesome, organically raised food.

WHAT DO KIDS REALLY EAT?

According to the Healthy Eating Index-2005, if "good diet" were a class taught at school, most kids would be flunking. The Healthy Eating Index is a measure of diet quality as defined by federal guidelines. The average score for all age groups did not meet the 2005 dietary guidelines for fruits, vegetables, legumes, whole grains, and oils. Unfortunately, children overexcelled in the arena of sodium, bad fats, and added-sugar consumption. An October 2010 study reported that the top sources of calories for two- to eighteen-year-olds were grain desserts (cookies, cakes, granola bars), pizza, and soda. Nearly 40 percent of the total calories consumed were in the form of empty-calorie foods. As horrifying as these statistics were, nobody seemed very surprised by them.
