

raising great kids **Food** for Thought

The Body, Brain, Behavior, and Inflammation Connection to Food Children Eat

By resident education specialist **Perk Musacchio** and **Monica Reinhard-Gorney**

“The kinds of food we eat have a direct, chemical-based effect on us from the first bite we take in the morning to the last snack before bedtime. Food modifies our hormones. It can improve or impair our metabolism. It can increase or decrease our energy levels. It can strengthen or weaken our concentration and brain performance.” – Natalie Geary, MD and Oz Garcia, Ph.D.

The ingredients in our food supply can wreak havoc on our brains and bodies, sometimes without us even knowing. Many times the root cause for not being our best self is due to inflammation in the body and brain, which can severely affect learning, behavior, social and emotional development, and physical and mental health. This is because today’s food supply is very different than it was years ago. In fact, one noteworthy pediatrician has a new diagnosis for his little patients who come to him with signs of ADHD only to be diagnosed as “Nutritional Deficit Disorder,” citing the lack of nutrient-dense foods as the culprit for their hyperactivity, irritability, and learning problems.

So many of the struggles that we see in children can be connected directly to food. Over and over again, we’ve seen the connection between food, behavior, and learning, and we’ve seen profound positive changes when some of the challenging behaviors or medical issues like acid reflux, eczema, and even asthma fade away when certain foods are eliminated from a child’s diet. Consider the following real-life example that happened pre-COVID-19 and was taken from our book, *No Manual? No Problem! How to Help Your Child Thrive in Today’s World*:

“My tummy hurts,” complains Katie. “I’m hungry,” says Michael. Stevie lays his head down on the desk and says he’s tired. It’s only 9:30 am. David rushes into the classroom because “we just got up.” Upon being asked if he had taken the time to have breakfast, his response was that he “had the blue juice.” The blue dye present on his lips backed up his statement. “I had some crackers,” chimes in one student. “We didn’t have anything in the refrigerator, so I had a pop tart,” says another. Then the chorus chimes in, “We didn’t have time for breakfast because we were in a hurry,” or “I didn’t eat breakfast because I wasn’t hungry.”

Answers like these point to a growing trend of minimally nutritious breakfasts with limited or no protein, “non-food” items,

or nothing at all. In fact, many kids prefer to live on a “white diet,” meaning a carb-rich diet including pastas, white bread, crackers, cereals, and generally, mostly white foods. This type of carb-laden diet can significantly impact learning, behavior, the immune system, and overall health.

We know that parents don’t need another lecture about junk food. However, because our food supply is different than it was in the past, we can no longer afford to be uninformed consumers. Many people are aware of the presence of corn syrup or high fructose corn syrup, aspartame (the “blue” packet), dyes and preservatives, and GMO’s (or Genetically Modified Foods) in our food supply, but most don’t know that many of these food ingredients or additives, while readily available in the American food supply, have been banned from most foods, and in particular foods marketed to kids, in the European Union. The rationale for the bans is typically related to the lack of evidence for the safety of these additives, but now there are actual studies that link these additives to poor health outcomes.

Did you know...

Food dyes and preservatives have been linked to hyperactivity.

Diet sodas, iced teas, yogurts, and many candies contain aspartame or sucralose. Several long-term studies have shown that just one beverage containing aspartame a day increases the rate of heart attack and stroke by 43 percent! Consuming artificial sweeteners actually tricks your brain and body to want more sweetness in your diet.

Studies have shown that corn syrup and high-fructose corn syrup are literally addictive and many people experience withdrawal-like symptoms as they exit the body, causing it to want more to relieve the discomfort.

Some GMO wheat-based products in America, which contain gluten, have been found to have high measurable levels of a known neurotoxin called glyphosate.

The spike in childhood food allergies interestingly corresponds to the time that GMO’s entered the U.S. food supply.

One third of American children are classified as overweight.

Allergies are on the rise, necessitating kids to see an allergist and have a skin prick test to identify the triggers for these allergic reactions. These tests typically measure IgE allergies, those serious, life-threatening allergies that cause an anaphylaxis reaction that requires immediate medical intervention. However, kids can also have IgG sensitivities to particular foods that are not usually life-threatening but can cause inflammation leading to conditions like eczema and acid reflux. By eliminating certain food culprits, the eczema and acid reflux can go away.

When our potassium level is low, we crave sugar.

A magnesium deficiency can lead to muscle weakness and cramping, constipation, difficulty sleeping, nausea, anxiety, and poor memory.

To counteract the bad, kids need lots of the good. They need healthy fats, especially in early childhood, as they are fuel for brain development and balance hormones. Many kids have been found to be deficient in zinc and iron. Did you know that a deficiency in iron can lead to a loss in appetite, while low levels of zinc can lead to a poor sense of smell? Smell is critical to a healthy appetite, so low zinc and iron levels can look a lot like picky eating. In addition, vitamin D is critical for a healthy immune system, as well as healthy teeth and bones. The CDC reports one third of American children are Vitamin D deficient. Interestingly, low Vitamin D and zinc levels have also been connected to poor outcomes in those who contracted SARS 2 - COVID-19. Kids need to consume foods that are rich in essential vitamins and minerals. If you suspect a problem, check with your child’s doctor to see if further blood work might be helpful.

We know that changing the way we eat can be hard! Especially for those picky eaters. We get it. We have been there, and here are some tried and true tips from our own homes:

Try not to use food as a punishment or a reward, as doing so leads to inadvertent connections between behaviors and food consumption.

Do not try to take away all the bad stuff overnight. This rarely works for anyone! Talk to your kids about why your family might be making some different food choices. Even young children can understand about too much sugar and the importance of proteins.

Consider serving vegetables first when kids are hungry, then offer the protein and lastly, serve the carb portion of the meal. Try seasoning foods with pink sea salt and other mild spices.

Limit fruit juices and offer water instead. Keeping hydrated is important.

Make simple swaps. It can take eight to 10 tries of a new food to acquire a taste. Be patient. We all have taste buds, and those taste buds can and do change. Take the food you want to eliminate. Let’s use syrup as an example. You probably have the kind that

contains high fructose corn syrup (check label). Pure maple syrup is actually good for you, but if unfamiliar with the taste, it is less palatable. Pour the usual syrup into a dish and mix in literally one tablespoon of the new stuff. This is such a small amount your child will not notice. Do this for a week, and then take out a tablespoon of the old and add in two tablespoons of the new. Continue to increase the new and decrease the old syrups. Overtime, the taste for the super sweet stuff will be gone. This lack of desire for super sweet will likely spill over into a lack of desire for other overly sweet foods. This technique can also be used with sodas, juices, yogurts, and peanut and other nut butters!

When our children are struggling or in pain, it can be very frustrating. Getting to the root cause of a behavior or illness is life-changing. We leave you with this true story, as it’s a vivid reminder about the importance of being a good detective and always chasing the why behind any behavior or illness.

One summer not too long ago, one of us was a Vacation Bible School helper. A grandmother dropped off her 4-year-old grandson with the warning that he can have great difficulties with transitions and could have epic meltdowns if the light or sound was too bright. During the first three days, nothing unusual was observed. On day four, the group started the morning with a snack, which unfortunately, happened to be ice cream. Within a short time, the little boy’s cheeks and ears became red, he started clapping his hands over his ears at loud sounds, and he had a drop-down tantrum when we had to rotate to the next activity. Milk can be one of the biggest food-sensitivity culprits. On the previous days, none of the snacks involved milk-based products.

The way to test whether your child has a food sensitivity is to eliminate it for several weeks. See if there is improvement, but also notice if there is a real flare in symptoms when you reintroduce it. Keeping a journal or writing your observations on the calendar will help you to notice trends and remember dates. Then you will have your answer!

Perk Musacchio and Monica Reinhard-Gorney are the co-authors of *A Student’s Guide to Communication and Self-Presentation* and *No Manual, No Problem: Strategies and Interventions to Help Your Child Thrive in Today’s World*. Perk is also the originator of the PeaceWalk® and a regular contributor to the *CF JunXion*. For more information, visit her website at www.skillstosoar.com. Monica is the owner of **Holistic Educational Counseling, www.holisticeducationalcounseling.com, a practice aimed at helping students reach their potential.**

For more information about building a healthy immune system through the foods you eat, consider reading Chapter 4 in *No Manual, No Problem: Strategies and Interventions to Help Your Child Thrive in Today’s World* by Monica Reinhard-Gorney and Perk Musacchio, “Cure Your Child With Food” by Kelly Dorfman, and “The Food Cure For Kids” by Natalie Geary and Oz Garcia.

