

## Autism & Nutrition

By Dana Yarn

When people think about food, they often think about how it tastes, looks, smells and feels in their mouths. Typically, we do not consider what the food actually does to our bodies. When you have a child with autism or a related disorder, it is important to realize that what your child consumes will have a major impact on his or her brain and body function. It is your role, as a parent, to understand how food effects and impacts your child's body.

### Nutritional Considerations in Relation to Autism

- **Brain function:** The calories, vitamins, minerals, amino acids and essential fatty acids found in food are a necessity to your child's brain development. If your child is lacking in any of the above nutrients, his or her neurotransmitter production will be affected, and visual and cognitive processing will be compromised. If your child is consuming too much sugar, artificial sweeteners or additives, brain function will be negatively affected and behavior or learning problems may develop.
- **Detoxification:** Exposure to neurotoxins can do damage to your child's brain and nervous systems, which in turn can lead to lower IQ, learning disabilities, compulsive behavior, aggression, motor dysfunction and developmental delays, just to name a few. Consuming nutrients like zinc, magnesium, selenium, beta carotene, vitamin A, vitamin E and choline help the body naturally get rid of harmful toxins such as mercury, arsenic, cadmium, PCBs, pesticides and solvents.
- **Digestive health:** The amino acid glutamine requires a constant supply of vitamins and minerals to maintain the health of the digestive tract. If your child is deficient in any nutrients, it can impact the cellular growth of the gastrointestinal tract. This hinders the body from absorbing nutrients from foods, which can in turn negatively impact the brain and the body. Sources of glutamine include cabbage, beets, beef, chicken, fish, beans and dairy products.
- **Immune function:** Poor nutrition puts your child at risk for developing allergies, acute and chronic illnesses, respiratory infections and ear infections. Our immune system relies on vitamin C, vitamin A, vitamin D, B vitamins, iron, selenium, zinc and flavonoids to function at its best level. By ensuring your child consumes these nutrients, you will reduce the likelihood of complicating his or her disorder.
- **Anemia:** Dietary deficiencies in iron, vitamin B6, copper, folate, vitamin B12, vitamin C and vitamin E can cause anemia. Anemia can lead to irritability, headaches, loss of appetite, lethargy, hyperactivity, inattentiveness and poor performance in school.

### The First Step To Your Child's Healthy Diet

Advanced nutrition plans designed for people with autism are available, but many families mistakenly start out with these complicated therapies rather than starting with the basics. Instead, think of nutrition as a

building block, with each step building upon the other. Start by identifying and resolving the basic nutrition issues and then build upon them.

- **Eliminate synthetic food additives:** Food has changed so much over the past 40 years. Today, children typically consume highly processed, low-nutrient, chemically preserved meals and snacks. Studies correlate the increase in chemicals, excess sugar, trans fat and preservatives in our food to the increase of developmental and neurological disorders in our children. The first step is to transition your child into a diet that consist of whole foods and eliminate artificial ingredients.
- There are 24 different types of synthetic food additives found in the foods we eat. The Food and Drug Administration (FDA) must approve each additive and deem it “generally recognized as safe” (GRAS). This means it is proven to be safe for the general population and does not promote health hazards such as cancer. Unfortunately, no one truly knows the effects these chemicals have on our health. More importantly, the medical community does not know the short- and long-term effects these chemicals have on a child’s developing brain and nervous system. The particular concerns for people with autism are artificial colors, artificial flavors, preservatives and artificial sweeteners.
- **Limit exposure to pesticides:** The best way to limit your child’s exposure to pesticides is to buy organic or all-natural foods whenever possible. These foods are grown, handled and processed without the use of artificial pesticides, artificial fertilizers, sewage sludge, artificial additives, hormones or antibiotics. They do not contain genetically modified ingredients. Animal research has shown pesticides can affect normal fetus brain development, resulting in hyperactivity and learning and developmental disabilities. You cannot completely control the amount of pesticides your child is exposed to, but you are capable of lowering his or her exposure by purchasing certified organic or all-natural foods whenever possible.
- **Limit refined sugar:** Sucrose, also known as white sugar or table sugar, has been the sweetener of choice to sweeten food and drinks. In the past decade, high fructose corn syrup has begun to replace sucrose in many processed foods in the United States. High fructose corn syrup is much sweeter than sugar, and some health professionals relate its consumption to increasing a person’s risk for developing type 2 diabetes and excess weight gain.
- In most children, consuming excess sugar is related to behavioral problems. A simple carbohydrate, sugar is rapidly absorbed into the bloodstream, thereby causing blood sugar to spike and then rapidly fall. Children are sensitive to this response, and their bodies overact with a biochemical response that can lead to negative behavioral symptoms. Symptoms include nervousness, fatigue, confusion, anxiety, depression and irritability. In short, sugar sets into motion a biochemical response in a child’s body that can lead to behavioral problems.
- **Eliminate trans fat:** Trans fat is a product of hydrogenation — the process whereby hydrogen is added to a liquid vegetable oil, creating a more dense fat. Partially hydrogenated fats (trans fat) have replaced natural solid and liquid fats in our foods because they’re cheaper to use and prolong the shelf life of foods.
- There are several reasons we should stay away from trans fat. It raises our bad cholesterol (LDL) and decreases our good cholesterol (HDL) levels, thereby increasing our risk for heart disease, diabetes and cancer. The daily recommended intake of trans fat is zero

grams. For a child with autism, trans fats have a negative impact on the liver, specifically affecting the enzyme delta 6 desaturase, which is a critical process of converting omega-3 and omega-6 fatty acids into active forms. Omega-3 and omega-6 fatty acids are critical for brain development, brain function and vision processing. Research has shown that children with autism or related disorders already have low levels of delta 6 desaturase. When they consume trans fat, it makes their diagnosis worse.

- **Increase omega-3 fatty acids:** Essential fatty acids (EFA) are necessary fats that our bodies can't make and must be obtained through diet. There are 2 groups of EFAs: omega-3 and omega-6. The American diet typically provides too many omega-6 fatty acids and too little omega-3 fatty acids. The deficiency of omega-3 fatty acids in our diet has been linked to autism, dyslexia, attention deficit hyperactivity disorder, depression and anxiety.

Research shows incorporating omega-3 fatty acids into children's diets improves poor learning and behavioral problems. Omega 3-fatty acids can be found in fish, flaxseed oil, canola oil, walnuts and pumpkin seeds. Supplements can also be incorporated. Seek advice from your doctor regarding proper dosage.

### **Service Foods — Delivering Healthy Food and Expertise for an Energized Life**

Service Foods is the largest company in America delivering all-natural, chemically pure foods to your family. We specialize in providing families with all-natural, top-quality food items like fully aged USDA Top Choice and prime grain-fed, grass-finished beef; super-select pork; grade A poultry; sashimi-grade seafood; plus all-natural and organic vegetables — all of which are 100% guaranteed. Nutrition therapy has a direct impact on monitoring autism. Focus on eliminating processed foods and chemicals from your child's diet, and you will notice a difference in his or her behavior and quality of life.

### **Supplementation**

Health professionals all agree supplementation is essential when treating and managing autism. The list of supplements below is recommended in addition to a healthy diet that is free from chemicals, food additive and processed ingredients. Make sure they are manufactured by a company with NPA's certification for good manufacturing practices. Additional supplements may be recommended by your doctor.



Probiotics  
Glutamine  
Multivitamin

Omega 3 fatty acids from fish or krill oil  
Iron and folate (only if deficient)