Nutrition and Autism

When people think about food they often think about how it taste, looks, smells and feels in their mouth. 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 food is something more then just the pleasure of eating. What your child consumes will have a major impact on their brain and body function. It is your role as a parent to know exactly how food effects and impacts your child's body.

Nutritional Considerations in relation to Autism

Brain Function. The calories, vitamins, minerals, amino acids, 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 their neurotransmitter production will be effected and visual and cognitive processing will be compromised. If your child is consuming too much sugar, artificial sweeteners or additives the brain function will be negatively affected and behavior a learning problems may develop.

Detoxification. Exposure to neurotoxins can do damage to your child's brain and nervous system which in turn can cause them to have a lower IQ, learning disabilities, compulsive behavior, aggression, motor dysfunction, developmental delays to name a few. By consuming nutrients like zinc, magnesium, selenium, beta carotene, vitamin A, vitamin E and choline help the body naturally get rid of harmful toxins like mercury, arsenic, cadmium, PCB's, 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 he gastrointestinal tract. This hinders the body from absorbing nutrients form foods which 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 they will not further complicate their 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, and loss of appetite, lethargy, hyperactivity, inattentiveness, and poor performance in school.

The First Step to Your Child's Healthy Diet:

There are advanced nutrition plans out there for Autism and a common mistake for a lot of families is they start out with these complicated therapies rather then starting with the basics. Think of nutrition as a building block, each step builds upon the other, start with identifying and resolving the basic nutrition issues and then build upon those.

Eliminate Food Synthetic Food Additives

Food has changed so much in 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, 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) has to approve the 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 any health hazards such as cancer. Unfortunately in all of the mainstream foods we consume additives and chemicals in every bite and no one truly knows the effects that these chemicals have on our health. More importantly the medical community does not know the short and long term effects that these chemicals have on a child’s developing brain and nervous system. The particular concerns for 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 a developing fetus and normal brain development, resulting in hyperactivity, and learning and developmental disabilities. You cannot completely control the amount of pesticides your child is exposed to; you are capable of lowering their 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 sugar 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 it’s consumption to increasing your risk for developing type 2 diabetes and excess weight gain.

In most children consuming excess sugar is related to behavioral problems. It is a simple carbohydrate that is rapidly absorbed into the bloodstream and blood sugar rises followed by a rapid fall in blood sugar. 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 conclusion 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, which is the process where hydrogen is added to a liquid vegetable oil creating a more dense fat. Partially hydrogenated fats (trans fat) have replaced natural solid fats and natural liquid oils in our foods because it's cheaper to use then the real thing and they prolong the shelf life and flavor stability of foods.

There are several reasons we should stay away from trans fats. They raise our bad cholesterol (LDL) and decrease our good cholesterol (HDL) levels therefore increasing our risk for heart disease, diabetes and cancer, 0 grams are recommended daily. For a child with autism there is a negative impact on the liver, specifically affecting the enzyme delta 6 desaturase, which is a critical process of converting omega 3 and 6 fatty acids found in foods into active forms. Omega 3 and 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 situations 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 EFA's, omega-3 and omega-6. The American diet provides too many omega-6 and too little omega-3. 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 improve 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.