

## CERTIFIED CHILDREN'S HEALTH COUNSELOR ONLINE COURSE SESSION 5:

Mood Changes and Food Allergies: When to move to a gluten free diet

### Inattentive, Moody, or Even Violent? You or Your Child May Be Suffering from Non-Celiac Gluten Sensitivity

Many patients diagnosed with celiac disease also deal with behavioral and neurological disorders. Patients with schizophrenia and children with autism show a marked improvement when placed on a gluten-free diet.

Celiac disease is an autoimmune condition that is marked by an immune response to the body's own intestinal cells.



Autoimmunity is an inside job, and disease comes from a confused immune system, rather than an infectious bug. During a flare-up, the immune system will tag cells lining the small intestine and begin destroying them.

According to the National Foundation for Celiac Awareness, 3 million Americans have celiac disease. And symptoms are not only limited to the gut. Many of those with celiac disease also deal with depression.

As it turns out, there is something called *non-celiac gluten sensitivity*. It affects as many as 18 million Americans.

Non-celiac gluten sensitivity has all the symptoms of celiac disease, but a doctor cannot diagnose it with standard celiac tests. These patients will have negative lab results, and a

biopsy of the small intestine will reveal nothing remarkable. However, these patients only respond to a gluten-free diet.

Like celiac disease, those with non-celiac gluten sensitivity have a physical response to gluten - except they may never know it. This physical response could appear to be nothing more than anger management issues, depression, or unexplained mood swings.

Patients with schizophrenia and children with autism show a marked improvement when placed on a gluten-free diet. So much so that results have encouraged researchers to investigate the link between mood disorders and gluten.

Transitioning to a gluten-free diet could help a child with unexplained behavioral issues like mood swings, depression, and even violence. Other signs of non-celiac gluten sensitivity include:

- Fatigue
- Headaches or foggy mind
- Tingling or numbness in hands and feet
- Muscle spasms
- Joint pain

- Missed menstrual periods
- Itchy skin rash or eczema
- Acne
- Constipation or diarrhea
- Gas and bloating

## What is Gluten?

The good news is that your doctor may no longer seem mystified or dismissive when you explain the gluten-free diet. This is because many journals are now publishing material on the effects of gluten on mood and behavioral disorders, as well as non-celiac gluten sensitivity.

Gluten is blend of proteins, gliadin and glutenin. It is found in not only wheat but also in related grains, such as barley and rye. Gluten gives food structure, chewiness, and texture.

While breads and pasta obviously contain gluten, you may be surprised to learn that food producers use gluten to make things like imitation meats, ketchup, and ice cream.

It is tough to avoid gluten. And for many, it is simply not worth the trouble.

Non-celiac gluten sensitivity is not the same as a wheat allergy.

A wheat allergy is diagnosed using an IgE (immunoglobulin E) blood test. IgE is a class of tags that the immune system uses in an allergic response or hypersensitivity that can affect the skin, the respiratory system, or the gut. Those who have symptoms of gluten intolerance may test negative for a wheat allergy.

*So far, there are no pharmaceutical cures for celiac disease and non-celiac gluten sensitivity.* The only treatment for celiac disease and non-celiac gluten sensitivity is a 100% gluten-free diet.

Because there are no laboratory tests that specifically identify gluten sensitivity, diagnosis and treatment are an elimination diet.

If you are sensitive to gluten, besides wheat, you will also want to watch out for:

- Semolina
- Malt
- Groats
- Bulgur
- Muesli
- Durum
- Spelt

- Einkorn
- Rye
- Barley
- Oats, which can be contaminated with gluten

## **Our Children at Risk**

These days, many parents of children with behavioral disorders are finding themselves with limited options when it comes to soothing their child's needs. What do you do when your little baby suddenly becomes a violent and hysterical toddler?

Fortunately, new research over the last 10 years has revealed that emotional sensitivity and behavioral disorders in both children and adults respond, sometimes completely, to a gluten-free diet.

If your child has non-celiac gluten sensitivity, chances are that you will welcome the (sometimes) difficult transition to a gluten-free diet.

Often, changing your child's diet means changing the diet of your entire family.

## **3 STEPS TO TRANSITION TO A GLUTEN-FREE DIET**

### **1. It's okay to start slow.**

Sometimes people and especially children get hooked on one or two foods. Transitioning to gluten-free foods may seem impossible. If you start slow, the process will naturally unfold and ends up being easier than you anticipated.

I recommend adding coconut water kefir to your diet daily and to whatever juice your child drinks. This one step will inoculate the gut with beneficial bacteria, which will dampen the desire for sweet and bready foods.

### **2. Avoid gluten-free flours and specialty foods.**

While gluten-free breads, pastas, and flours may sound tempting, it is best to avoid them altogether. Many of these replacements are full of sugar and refined oils. Both excessive sugar and refined oils can keep the body in an acidic state, which inhibits the healing process.

### **3. Approach the change in diet with dedication.**

It may take some time for the signs of gluten sensitivity to calm down. As you and your family transition to a gluten-free diet, stay positive. Once the trigger foods have left the system, the difference in mood, energy, and digestion is often quite noticeable.

If you need support in transitioning your child to a gluten-free diet, BEDROK - Body Ecology Diet Recovering Our Kids – is a tremendous resource for parents. For tips, insight, and wisdom, you can find more information at [www.bedrokcommunity.org](http://www.bedrokcommunity.org).

If your child has an unexplained behavioral issue, it may be time to consider their diet. Transitioning to a gluten-free diet is possible with 3 simple steps:

1. **Start out slow.** If you feel overwhelmed by making this change to your family's diet, start by adding coconut water kefir to your diet and your child's juice each day. This will support the gut with beneficial bacteria to reduce cravings for gluten-rich foods.
2. **Avoid gluten-free flours and products.** Many gluten replacement products are chock full of sugar and refined oils, which will keep the body acidic to inhibit healing.
3. **Stay dedicated.** It can take time for gluten to leave the system to calm gluten sensitivity. Body Ecology is here to help with our BEDROK community for parents.

## Going Gluten-Free

Many parents of children with autism—and a growing number of others—say that banning bread and pasta changed their lives. Could it help your family?

Just a few years ago, most people had never even heard of gluten. Now, chatter about the protein that's found in wheat and other grains seems to be everywhere. And not just on celebrity Twitter feeds—but on playgrounds, playdates, autism message boards, and mommy blogs as parents are jumping on the gluten-free bandwagon. Some are eliminating gluten to treat celiac disease, an autoimmune disorder that's on the rise in both kids and adults. But others say that switching to a gluten-free diet changed their child's behavior and quality of life for the better—even dramatically improving the symptoms of autism. We'll help you decide if there could be a benefit for your child too.



## Carb Cautions

Gluten gives pizza crust its stretchiness and bread a puffy texture. You'll find it in foods like pasta, cereals, crackers, cookies, and grains such as couscous, bulgur, bran, and spelt. (Most brands of oats are not gluten-free because they can become contaminated during processing and transport.) Gluten is in many less obvious places too, like soy sauce, candy, lunch meat, marinades, vitamins, and lip balm.

We've been eating gluten for centuries, so why is it suddenly an issue for an increasing number of people? The grain our grandparents ate was very different from what we eat today, explains Alessio Fasano, M.D., medical director of the Center for Celiac Research at MassGeneral Hospital for Children, in Boston. Modern grains have a much higher concentration of gluten, thanks to selective breeding to get higher crop yields. Our overuse of antibiotics could also be changing the bacteria in our gut and making it more difficult for us to manage gluten. And the hyper-sanitized environment (think antibacterial everything) may be signaling some people's immune system to see gluten as an enemy.

## Tummy Tamer

That kind of immune-system misfire is exactly what happens to people with celiac disease: Gluten sets off a reaction that damages the walls of their intestines, causing symptoms like stomach pain and vomiting. The injured intestines can't digest and absorb nutrients properly, leading to weight loss and serious problems such as anemia and low bone mass.

Ruth Milligan took her son Joseph to the pediatrician when he was 4 because of unexplained vomiting; the doctor also noticed his paleness, distended belly, and slowed growth. After Joseph was diagnosed with celiac disease and stopped eating gluten, his GI problems disappeared and he gained a much-needed pound a month. "He finally became an energetic kid," says the Columbus, Ohio, mom.

Doctors screen for celiac with a blood test to look for antibodies against gluten and then diagnose it with an endoscopy and intestinal biopsy to check for damage. However, some kids who test negative may still have trouble with gluten. A fairly new diagnosis called gluten sensitivity is given to someone who has the physical symptoms of celiac but none of the intestinal injury or antibodies against gluten. It's estimated that as many as 6 percent of the population has it (compared with 1 percent for celiac).

If digestive conditions like colitis are ruled out, a child feels better on a gluten-free diet, and symptoms return after reintroducing gluten, he's considered gluten sensitive.

When Jennifer DeRouen's son Mitchell was 2, he was irritable, frail, waking frequently at night, struggling with language development, and projectile vomiting. Though his celiac test came back negative, a doctor thought that Mitchell might have gluten intolerance. DeRouen, of The Woodlands, Texas, says she removed gluten (and dairy) from his diet, and he became a different kid within a matter of days. The physical problems stopped, and his mood and speech greatly improved. Though she was relieved they found the root of Mitchell's problem, it's frustrating that among teachers and parents his gluten sensitivity isn't taken as seriously as food allergies are. "People think we're just making some kind of wacky health choice," she says.

[Learn more about the Center for Celiac Research at MassGeneral Hospital for Children.](#)

## Help for Autism

A gluten-free diet has been embraced by many parents in the autism community, who say eliminating gluten (along with casein, the protein in dairy) improved their child's symptoms significantly -- in some cases even "curing" their child of autism. In fact, the gluten-free, casein-free diet (GFCF) is the number-one alternative treatment parents are trying for autism, with about one out of five families following it, according to a survey by Autism Speaks. "This isn't a diet that we actively promote, but we want to be supportive of families without giving them false hope," says Daniel Coury, M.D., medical director of the Autism Speaks Autism Treatment Network.

There is reason for skepticism: A large controlled study on the effectiveness of the GFCF diet has never been done. However, there have been some recent, hopeful findings. Researchers at Penn State found that a GFCF diet improved symptoms such as tantrums, poor eye contact, impaired speech, and skin rashes for certain groups of kids with autism: those who followed the diet most closely, those who stayed on it for at least 6 months, and those who also had food allergies or digestive issues such as chronic constipation and diarrhea (nearly half of kids with autism have GI problems).

When Denise Fulton's son Grant was diagnosed with autism at age 2, he had chronic diarrhea and rashes that frequently became infected, and he was waking every hour during the night. After removing gluten, dairy, and soy, his GI issues stopped, he began sleeping soundly, and his skin cleared over a few weeks. "His speech improved and his behavioral therapies became much more effective," says Fulton, of Bellingham, Washington.

However, when Alison Singer tried a GFCF diet after her then- 3-year-old daughter Jodie was diagnosed with autism, she stopped the diet after a few months. "I saw no changes, except that I was exhausted from buying and cooking new foods and worrying that Jodie wasn't eating enough," says Singer, from Scarsdale, New York. "I felt like it only added to her difference because she couldn't have the same things as other kids." Singer, who is now the president of the Autism Science Foundation, advises parents to focus instead on the interventions that are proven to help, such as applied behavior analysis and occupational, physical, and speech therapies.

Why the GFCF diet seems to help certain children but not others isn't fully understood. One theory is that some kids with autism are unable to fully break down gluten and casein; they may have a "leaky gut" that allows the partially digested proteins to seep through the intestinal walls and into the bloodstream, where they collide with immune cells. The activated immune cells then slip into the brain and cause inflammation. "Brain inflammation produces a cascade of chemicals that can increase sensory hypersensitivity, sleep disturbances, and problems paying attention," says Martha Herbert, M.D., Ph.D., assistant professor of neurology at Harvard Medical School and coauthor of *The Autism Revolution Whole-Body Strategies for Making Life All It Can Be*. "There's also evidence that the proteins cross into the brain and act like opiate drugs." This would not only cause behavior changes but also explain why some children with autism eat a "beige diet" consisting of mostly gluten- and casein-containing foods like crackers, grilled-cheese sandwiches, and milk: They are literally addicted to them.

## **ADHD Advances**

Some parents are also getting rid of gluten with the hope of improving their child's ADHD -- and there does seem to be a connection between gluten intolerance and attention. People with celiac disease often report brain "fogginess" and agitation when they eat gluten. A small Italian study found that 15 percent of kids and adults with ADHD tested positive for celiac. After they ate a gluten-free diet for six months, they had a decrease in distractibility and impulsiveness.

Though her son Oliver doesn't have celiac, New York City mom Katherine Pennington says cutting out gluten three years ago made a difference in his ADHD and eventually enabled him to stop taking meds. "He became calmer, kinder, and easier to connect with," she remembers. When Oliver, now 12, occasionally splurges on a bagel, he immediately becomes restless.

Kids with undiagnosed celiac or gluten sensitivity may simply be showing ADHD-like symptoms. "With primary ADHD, however, diet changes don't make a dramatic difference," says Jay Salpekar, M.D., director of the Neurobehavior Program at Children's National Medical Center, in Washington, D.C. "A healthy diet will improve a child's energy level and feeling of well-being, but it probably won't make him less hyperactive or more attentive if he truly has ADHD."

**RELATED:** [Kid-Friendly Gluten-Free Recipes](#)

**Have your child tested.** Ask your doctor for a referral to a pediatric gastroenterologist for a blood test and, if needed, an intestinal biopsy (it's a 20-minute procedure, but involves anesthesia). Avoid the number-one mistake: having your child try the diet before the tests, which can result in false-negative results. If the tests are positive, your child has celiac disease. But kids who have gluten sensitivity -- and possibly autism or ADHD -- may test negative but still do better without gluten.

**Seek professional help.** Work with an experienced practitioner, such as a registered dietitian, who can help you map out meals and snacks. Gluten is found in so many foods -- and many kids with autism are already very picky eaters -- so eliminating it can leave gaping holes in your child's diet. Find out whether he needs vitamin or mineral supplements.

**Plan ahead.** Expect to eat at home most of the time and to spend extra time shopping for food and organizing meals, especially when you first begin the diet. "Every Sunday afternoon we make a menu for the week," says Esther Snodgrass, of Baltimore, whose 7-year-old daughter, Laura, has celiac. "This gives me a sense of control that I felt was lost when she first got the diagnosis." If your child has celiac, you'll need to be mindful of cross-contamination with gluten, since even a few crumbs of bread can cause damage to the intestine. That means that you can't share serving spoons, cutting boards, or even toasters.

**Do some detective work.** If you're going gluten-free for ADHD or autism, it's helpful to pinpoint what improvements you're hoping to see. "Take a day or two to establish a baseline of your child's symptoms," says Dr. Coury. How many words is she saying? How many tantrums does she have in a week? How long can she focus on her schoolwork? Then you can reassess over the course of weeks and months on the diet. If you're not seeing any significant changes, the diet may not be worth your while.

**Be patient.** Children who have gluten sensitivity will feel better within a few days on a gluten-free diet, says Dr. Fasano. But with celiac, it can take at least 4 to 6 months for the intestines to heal completely. Experts say that you'd need to stick with a gluten-free diet for at least 3 to 6 months for a child with autism or ADHD to see if there will be any improvement.

**Focus on quality.** Though experts disagree about whether a gluten-free diet is helpful beyond celiac disease, they all believe that a healthy diet full of fresh whole foods is the best way to feed kids. That may be the key lesson from the gluten-free diet, which tends to eliminate a lot of processed foods. Says Dr. Hyman, "When children eat better, they're going to feel better."

## Gluten-Free Faves

The base of any diet -- including a gluten-free one -- should be whole foods such as produce and lean protein. But for convenience, it's nice to have a small stash of packaged goods. "Products finally taste great and are easy to find in stores or online," says Jen Cafferty, a Chicago mom who founded the Gluten & Allergy-Free Expos. We asked gluten-free families for their picks; the products below topped their list.

- Udi's Gluten Free Snickerdoodle Cookies
- Pamela's Baking & Pancake Mix
- King Arthur Flour Gluten-Free Brownie Mix
- Edward & Sons Let's Do...Gluten Free Sugar Cones

- KinniToos Sandwich Cream Cookies
- Glutino Gluten Free Pretzel Twists
- Annie's Gluten Free Creamy Deluxe Rice Pasta Dinner
- [Learn more about Gluten & Allergy-Free Expos.](#)

## **Common Food Triggers of Behavioral Issues**

Child behavior and food have been found to be closely linked. Studies show that certain foods can cause or at least worsen behavioral issues like ADHD and other learning disorders. While changing a child's diet might seem like a daunting task at first, many parents end up feeling relieved when they see positive changes in their child's behavior, because it could reduce the need for medication and other treatment options. For this reason, parents whose children have behavioral disorders should consider this list of common food triggers of behavior problems.

### **Dairy and Behavioral Issues**

Food for the Brain reports that dairy is the most common food allergy among children, and for those who have ADHD, hyperactivity and food with dairy products seem to be associated with each other. This means that some children act out more than usual after consuming milk, cheese, yogurt, or other food with lots of dairy. Kids with a dairy sensitivity often become congested, bloated, and tired, but those are just the physical symptoms. They might also become irritable, depressed, anxious, and unable to concentrate.

### **Gluten and Irritability**

According to ADDitude, gluten is another of the food triggers that can lead to bad behavior in kids. Gluten is mostly found in wheat, which means most types of bread, cereal, and crackers contain this common ingredient. Hyperactivity and food with gluten seem to go hand in hand in children with some sensitivity to this food. Irritability and aggressiveness are other bad behaviors that gluten can trigger.

### **Artificial Food Dyes and Hyperactivity**

Undesirable child behavior and food dye are also often related. According to Disease Proof, food dyes are found in most processed foods, including cereal, juice, and candy. The dyes that are known for causing symptoms include Yellow 5, Yellow 6, Blue 1, and Red 40. Hyperactivity and food dyes have been linked in studies. That's probably why synthetic food dyes are actually banned in some countries, such as the UK, but most of the processed food in the US still includes them.

Clearly, some food triggers behavior problems, but the good news is that certain foods can actually improve these issues. For example, according to WebMD, the best foods for people with ADHD to eat include meat, nuts, and beans for protein. Complex carbohydrates, which can be found in fresh fruits and vegetables, are also recommended. In addition, omega-3 fatty acids can help with behavior problems, and these can be sourced from salmon, tuna, walnuts, and olive oil. Including these foods in the diet and avoiding the ones that commonly cause bad behavior can make a noticeable difference for many children.

## 5 Foods That Negatively Affect Your Child's Mood

Parents intuitively know that food can impact their child's behavior and mood. We know that sweets, for example, can cause bouts of hyperactivity. But mood-altering food isn't limited to sugar – there are other culprits in the snacks and meals that we feed our little ones. The following five foods are the most common contributors to mood and behavioral changes in children.

1. Dairy – If your child is lactose intolerant or allergic to the proteins found in dairy, you may see changes in her mood and behavior. Many children become irritable, cranky, or aggressive. Children with dairy allergies or intolerance also tend to suffer from frequent colds and ear infections. Babies may exhibit colicky symptoms, whereas toddlers and older children may become inconsolable and irritable.
2. Artificial Coloring – Many countries have banned artificial coloring due to the detrimental effects these chemicals have on children. Linked to ADHD, anxiety, hyperactivity, and headaches in children, artificial coloring can also cause significant behavioral changes. Because artificial coloring is found in many sugary foods, parents often blame behavioral changes on sugar. Artificial coloring is also often hidden in unexpected foods like bread and yogurt. Avoid products with yellow No. 5, red No. 40, and blue No. 1 if you're concerned about your child's mood swings after consuming food with artificial coloring.
3. Sugar – Sugar can cause a child to be hyperactive, which is often an immediate indicator that sugar is the culprit. However, sugar is in just about everything the average child eats, unless the child is eating a whole foods-based diet. Sugar has been shown to cause long-term health damage, and a diet high in processed foods has been linked to depression, cognitive delay, and sleep problems.
4. Preservatives – There are several preservatives that may cause behavioral problems in children. They include but are not limited to nitrates, nitrites, and sodium benzoate. Monosodium glutamate (MSG) is a flavor enhancer that also causes mood and behavior changes, including headaches and hyperactivity. Sodium benzoate is commonly found in juice products marketed toward children.
5. Food Allergens – Common food allergens are dairy, nuts, eggs, soy, and corn. When a child has an intolerance or an allergy to a particular food, it can cause significant health and behavior issues. However, it can be difficult to pinpoint which allergen is making your child sick without the help of an allergist. A food intolerance, for example, is often missed and a child is instead diagnosed with ADHD.

If you notice behavior changes or mood swings in your child, consider keeping a food journal. Track what they eat and when they exhibit concerning behavior. Try eliminating suspicious foods to see if the behavior changes. While food isn't the cause of all behavioral issues and conditions, it's important to make sure that your child is not suffering from something that can be easily remedied.

## These 24 Common Food Additives May Increase Anxiety and Depression in Kids

Research has shown that the food additives used in hundreds of children's foods and drinks can cause temper tantrums and disruptive behavior. A Government-funded study confirms what many parents have long suspected about the effect of chemicals put into sweets, biscuits and foods. Colorings in products such as Smarties, Jelly Tots and fizzy drinks could spark behavior changes in up to a quarter of toddlers.



Research into a group of three-year-olds found they were more likely to lack concentration, lose their temper, interrupt others and struggle to get to sleep when they drank fruit juice dosed with colorings and preservatives.

Following the study, food watchdog the Food Commission has found that 200 children's foods and drinks contain one or more of the additives called into question by the research.

The Commission is calling for the additives to be removed from the everyday foods and drinks which appeal to children. Even youngsters with no history of hyperactivity can be affected, said the scientists. They concluded that all children could benefit from the removal of specified artificial food colorings from their diet.

The Food Commission claims it is the first time a Government-sponsored scientific study has corroborated the link between food colorings and preservatives and changes in children's mood and behavior.

A group of 227 three-year-olds from the Isle of Wight took part in a month long project by the UK Asthma and Allergy Research Center. For two weeks the children drank a daily fruit juice dosed with 20mg of artificial colorings and 45mg of preservative, which are either equal to or below permitted levels. The additives tested were the artificial food colorings Tartrazine E102, Sunset Yellow E110, Carmoisine E122, Ponceau 4R E124, and the preservative Sodium Benzoate E211. All five were given at the same time in a single drink.

For the other two weeks the children drank a fruit juice which was identical in appearance but without the additives. Parents filled in reports assessing their child's behavior on criteria such as interrupting, fiddling with objects, disturbing others, difficulty settling down to sleep, concentration and temper tantrums. The report said the results showed the artificial food colorings and sodium benzoate preservative had 'substantial effects' on behavior.

The scientists concluded that significant changes in children's hyperactive behavior could be produced by removing colorings and additives from their diet. They added: 'The findings suggest that benefit would accrue for all children from such a change - and not just for those already showing hyperactive behavior or who are at risk of allergic reactions.'

The Food Commission wants a ban on the additives and says the colorings tested have been restricted in other countries to protect children.

A spokesman for the Government's Food Standards Agency said the research was not conclusive. Nestlé Rowntree, which makes Smarties, Fruit Pastilles and Jelly Tots, said food additives it used were permitted by European and UK laws and any additives or colors

had been tested to the highest standards. GlaxoSmithKline, which produces Ribena, said: 'We certainly wouldn't use any additives unless they were approved as safe.' Burton's Foods, which makes Jammie Dodgers, said its biscuits contained only half the amount of Carmoisine stated in legal guidelines. Cadbury Trebor Bassett, which makes Maynard Wine Gums, said: 'Carmoisine is a permitted coloring which has been used for many years.' Campina UK, which produces Yazoo Milk Drinks, said it used only approved ingredients.

## **Which Additives Do We Need To Look Out For?**

### **Artificial Colors**

(in sweets, drinks, takeaways, cereals and many processed foods)

- 102 tartrazine,
- 104 quinoline yellow,
- 107 yellow 2G,
- 110 sunset yellow,
- 122 azorubine,
- 123 amaranth,
- 124 ponceau red,
- 127 erythrosine,
- 128 red 2G,
- 129 allura red,
- 132 indigotine,
- 133 brilliant blue,
- 142 green S,
- 151 brilliant black,
- 155 chocolate brown Natural color,
- 160b annatto (in yoghurts, ice creams, popcorn, etc. 160a is a safe alternative)

### **Preservatives**

- 200-203 sorbates (in margarine, dips, cakes, fruit products)
- 210-213 benzoates (in juices, soft drinks, cordials, syrups, medications)
- 220-228 sulphites (in dried fruit, fruit drinks, sausages, and many others)

- 280-283 propionates (in bread, crumpets, bakery products)
- 249-252 nitrates, nitrites (in processed meats like ham)
- Synthetic antioxidants - in margarines, vegetable oils, fried foods, snacks, biscuits, etc
- 310-312 Gallates 319-320 TBHQ, BHA, BHT (306-309 are safe alternatives)
- Flavor enhancers - in flavored crackers, snacks, takeaways, instant noodles, soups 621 MSG 627, 631, 635 disodium inosinate, disodium guanylate, ribonucleotides

Our food has changed so drastically in the last few decades it is no wonder that food-related behavior and learning problems in children are increasing. Contrary to what many parents think, additives - more importantly than just sugar - are to blame for behavior problems. Reactions are related to dose, so the more additives children eat, the more likely they are to be affected.

Additives are now used widely in foods such as bread, butter, crackers, yogurt, juice and muesli bars as well as in junk food. Parents who say 'we eat healthy food' are generally shocked to find that their children can be consuming 20 additives or more per day.

Irritability, temper outbursts, oppositional defiance, restlessness and difficulty falling asleep are the main behavioral effects of additives. But parents rarely realize that food chemicals can be associated with many other effects including arguing with siblings, making silly noises, speech delay, anxiety, depression or difficulty concentrating. Additive-free children are generally calmer, happier and more cooperative.

Rashes, headaches, bed wetting, stomach aches, sneaky poos, constipation or asthma can also be a problem. Parents of asthmatic children are usually unaware that sulphite preservatives (220-228) in foods such as dried fruits, sausages, cordials and some fruit drinks can irritate airways.

So what can we eat? Read ingredient labels. Choose preservative-free bread. Buy color-free yogurts, ice creams and lollies such as caramels and toffees. Choose plain rather than flavored chips, crackers and noodles. Encourage your children to drink water as their main drink.

### **Testimonial: This is Sofia's Story**

Sofia is the 2nd of my 3 kids and is turning 5 years old this month. She is a happy little girl who loves learning to spell short words and run around with her 3 and a half year old brother and copy whatever her 15 year old sister is doing. She is strong and often lifts up her brother for fun although they weigh almost the same.



A few years ago, Sofia was not this happy and strong. In fact she was almost impossible. Impossible to reason with; impossible to get to cooperate; and quite frankly, exhausting to parent.

Before you dismiss this notion based on the terrible twos (or ones or threes for that matter), just know that I have three kids so this mama can handle a little terrible twos, no problem. Bring it. But this was way more than that. I used to jokingly tell my husband we needed to call the exorcist. (Make that half jokingly.)

When I first switched to a grain free diet to resolve my long list of health issues, I did so alone. My husband thought I was nuts until he realized I was feeling so much better after just a couple of weeks and starting to lose an insane amount of weight without limiting my portions or exercising much (65 lbs and counting). It wasn't until I started reading the literature on how diet affects our neurotransmitters and brain that I started thinking that maybe changing Sofia's diet would help! I didn't want to get my hopes up. My husband is the one that is home with them all day since they're unschooled I simply suggested we try getting rid of gluten and dairy (two of the most common food sensitivities) for 30 days and see what happens.

When we started this experiment, Sofia's diet was what I then considered to be "healthy". We bought organic as much as possible, including our grains and dairy, which were 2 of the food groups she loved the most. Of course if you're going to change a toddler's diet (Sofia was almost 3 years old when we did this), it's going to be very difficult if the family is eating something else so we just did it for the entire household.

### **The Test: Remove gluten and casein (the protein in dairy) for 30 days to see what happens.**

We didn't switch them to eating organ meats, bone broth and vegetables right away but rather just swapped out pasta with gluten free pasta and had it less often while incorporating new meats and vegetables into the repertoire. They inspected the food at first and did a bit of grumbling... but they ate it.

Rinse and repeat for 30 days... except that a couple of weeks into it there was no doubt Sofia was a new person. We were never going back.

Over the following weeks we transitioned more and more healthy, nutrient dense foods into their diet and continued transitioning out the less nutrient dense foods like the gluten free grains we'd been relying on. They still love some gluten free pizza on occasion but when we eat at home which is most of the time, we try to make up for lost time by sneaking in the most nutrient dense stuff we can find and making sure they to include plenty of gut healing, bone building broth which they love.

I never intentionally reintroduced gluten into Sofia's diet. I was curious as to what would happen but I knew inevitably I'd find out eventually. Sure enough, she managed to sneak a few bites of a cupcake at a party and the disaster ensued shortly after: vomiting within a few hours and exorcist worthy behavior for the next 3 days.

## **Do I think going gluten free is going to cure all behavior disorders from ADD to Sensory Processing Disorder?**

Probably not. But will it improve the symptoms even just a little? It's certainly worth 30 days of extra time in the kitchen to find out. Gluten is not a food group and you're certainly not going to give your child a grain deficiency by depriving him or her from their beloved cereal for a few weeks.

### **3 Tips for Making Diet Changes for 30 Days**

#### **1. Start Slowly**

Swap out one meal at a time if that's easier and let them adjust. Just switching from pasta to gluten free pasta is a great start. Experiment with new foods and you might be surprised at what they end up loving. My toddlers love dipping artichokes in ghee for instance and now eat sardines out of a can! A few years ago it was cereal for breakfast, a quesadilla for lunch and pasta for dinner.

#### **2. Run Out**

If you don't want them to eat it, don't buy it. Chances are your kids are not the ones doing the grocery shopping. If they're used to snacking maybe they'd love these delicious tangerine gummies or some kale chips or macadamia nuts. You can play short order cook if you'd like but trust me, that will get old pretty quickly.

#### **3. Hold Your Ground**

If you're ready to make changes and you believe the food they're currently eating is not what is best for them then say no, and stick to it just like you do in other parenting scenarios that are not negotiable (running into the street, seat belts on in the car, teeth brushing, etc). Our kids definitely noticed each change we made. Some days we got a mini hissy fit. Other days we were boycotted. Other days we got a full on kicking-on-the-floor fit (which, of course, we filmed for blackmailing later in life). Thirty days will be over before you know it and it will likely change the way you view food forever. Happier kids are not a bad bonus either. If this experiment seems daunting and you could use some hand holding throughout the process, check out my ebook, The Paleo Survival Guide: Getting Started with Paleo. With chapters on how to transition your toddlers, your teenagers and spouse; how to eat real food on the go and while traveling, sleep optimization and exercise and many recipes to get you started right away it is sure to help you get on the right track.

If you have teenagers you're hoping to transition to a healthier diet this interview with my teen on her perspective on paleo may be helpful to you.

**CERTIFIED CHILDREN'S HEALTH COUNSELOR ONLINE COURSE - SESSION 5  
QUESTION & ANSWERS**

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE, ZIP, PC: \_\_\_\_\_

PHONE: \_\_\_\_\_

FAX: \_\_\_\_\_

E-MAIL: \_\_\_\_\_

Please be sure to fill out the information above, complete the test and e-mail or mail it back to us at [iridology@netzero.net](mailto:iridology@netzero.net) or P.O. Box 485, Weimar, CA, 95736-0485. We will grade your question & answer session and will let you know if we have any questions or concerns. **Please use a separate sheet to do this assignment.**

**All information will be kept private. If you would like comments and suggestions let us know and we will respond to you.**

1. What are the 3 Tips for Making Diet Changes for 30 Days?
2. Do you think that going gluten free is going to cure all behavior disorders from ADD to Sensory Processing Disorder?
3. Name 5 Additives Do We Need To Look Out For?
4. What are 5 Foods That Negatively Affect Your Child's Mood?
5. What are signs of non-celiac gluten sensitivity?
6. What is Gluten?