



Julie Matthews, CNC, is a leading biomedical autism diet expert. She works with parents from around the world to help children recover from the symptoms of autism through diet intervention. Julie presents at the leading autism conferences in the US and abroad, including the Defeat Autism Now (DAN!) Conference.

Julie has created two helpful autism diet intervention tools for parents. Her book, *Nourishing Hope for Autism*, and her autism nutrition education and cooking DVD, *Cooking to Heal*, are available at Julie's website www.NourishingHope.com.

“The most profound benefits come from multifaceted treatment plans that balance physician-recommended biomedical approaches and nutrition-centered autism diets.”

Diet for Autism



Fundamentals of Implementing a Special Diet

By Julie Matthews, CNC

Parents of children with autism are learning that food choices can help their sons or daughters become healthier and reach their full potential.

In addition to traditional behavioral therapy and other proven medical treatments, autism pediatricians, researchers, and nutritionists increasingly recommend that parents implement autism diets, autism-specific nutrition, and specialized supplementation.

Doctors now recognize that the bodies of children with autism are unique and require very specific care, including special enzymes for digestion, medical treatment for yeast infections and other common conditions found during testing, attention to digestive issues, special dietary requirements (autism diets), nutrient and fatty acid supplementation, behavioral therapy, and more. The most profound benefits come from multifaceted treatment plans that balance physician-recommended biomedical approaches and nutrition-centered autism diets.

When specific autism diets are correctly implemented by parents, improvements in gastrointestinal problems (including diarrhea and constipation), language, learning, focus, attention, eye contact, behavior, sleep difficulties, toilet training, skin rashes/eczema, and body pain have been observed. Since every child is unique, improvements will vary. Parents from around the world are beginning to share their stories of healing.

Beneficial and effective diets used by parents, autism nutritionists, and pediatricians include the gluten-free/casein-free (gf/cf) diet, Specific Carbohydrate Diet (SCD), Gut and Psychology

Syndrome (GAPS) diet, low oxalate diet, Body Ecology Diet, Feingold Diet, and Weston A. Price dietary principles.

Most parents begin with the gf/cf diet as children on the spectrum are usually highly allergic (or sensitive) to gluten and casein, the proteins found in wheat, flour, and milk. These food intolerances are known to impact body and brain function. Even if a child has tested negative for an allergic condition, studies and parent stories indicate that removal of gluten and casein can help physical and cognitive conditions in children in notable ways (as there can be many different negative reactions to these foods).

It is important to understand that these diets are customized food-focused strategies of nutritional intervention for autism. Making the change from not considering the impact of food intake (standard American diet) to giving specialized attention (nutrition-centered diet) is the key to promoting systemic healing. This is especially true for children with impaired digestive and immune systems (common in illnesses such as autism, asthma, allergies, and ADHD). All autism diets involve the removal of problematic foods and substances and the addition of easier-to-digest nutrient-dense foods that support these systems.

The removal of gluten and casein (gf/cf diet) and the removal of starches and sugars (on the SCD) are the most common initially recommended dietary interventions. Understanding how to begin and then progress with special diet implementation will greatly increase your effectiveness.

Initial Steps for Successful Autism Diet Implementation

1. Explore, research, and experiment. Before removing any foods from the diet, identify gf/cf or SCD alternatives. Find choices your child likes so that when you later remove the problematic foods, you will already have options they'll eat – this will smooth the transition.
2. Build your diet resources (books, cookbooks, videos, autism Web sites, etc.) to become familiar with the diet and learn helpful getting started ideas, what to expect, and what foods are allowed/not allowed. Watch instructional videos – many are available on YouTube. Join groups with others implementing autism diets. Visit my Nourishing Hope Autism Diet Community on Facebook (I answer questions regularly for group members). Networking assists with keeping the diet easy to implement and fun for the family, and it helps you feel supported by others who understand and share your experience.
3. Create a meal plan. Develop a list of diet-compliant foods and snacks your child will eat or that you would like to try making. Lay out a schedule of what you'll prepare and when. Remember to focus on organic foods when you can and avoid canned or processed foods with unnatural ingredients and colors. If you don't understand the ingredients, try to keep them off the dining table and out of the sack lunch!
4. Do foundational grocery shopping regularly. Shop for foods according to your meal plan, and purchase diet-compliant flours, milks, and other cooking staples or ingredients to make the basics. A meal plan will make shopping easy, and keeping your shelves stocked will allow you to have food on hand when your kids are hungry.
5. Begin implementation gently. Start by removing problematic foods over the course of several days or a few weeks. When beginning gf/cf, **eliminate one group at a time:** Start by removing casein from the diet for two weeks; then, remove gluten, and continue for at least three to six months. For SCD, start by reducing starchy carbohydrates and sugars for a week or two, and then begin the diet (more information on SCD implementation steps below). Keep a regular journal of changes in your child's diet and daily condition. Make notes of all changes that occur.
6. As you begin the diet, be sure to avoid foods that are difficult to digest and don't overdo the processed and sugary "substitutes." For example, avoid adding high sugar foods like gf/cf cookies and candy just because they're gf/cf. Sugar feeds yeast, and if your child is prone to yeast growth, avoiding candy and cookies is best. For SCD, start with the introductory diet if you can, and avoid foods that are hard to digest, such as nuts, beans, and dried fruit.

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Diet Specifics

On the gf/cf diet, gluten, the protein in wheat (and other grains such as rye, barley, spelt, kamut, and commercial oats), and casein (the protein in dairy) are removed from the child's diet. These proteins have been found to be problematic for many children on the spectrum; eating foods containing them can affect their bodies' physical and cognitive functions. Eliminating those foods (and ingredients containing those foods' proteins) from your child's diet and choosing healthier alternatives aids healing. Parents report that as children feel better, they also pay better attention and have heightened learning skills because digestive disturbances and hyperactivity are minimized.

In SCD, starches and disaccharides (many sugars) are removed. These substances are poorly digested by children whose bodies lack carbohydrate-digesting enzymes and/or have

inflamed digestive systems. When ingested, these sugars that are not properly broken down feed yeast and bacteria, creating greater inflammation and digestive problems. This diet is often helpful for severe digestive conditions and when gf/cf is not enough.

To become more familiar with these two diets and nutritional intervention for autism, the parents I support in my practice study my book, *Nourishing Hope for Autism*, as we implement diet together. For parents at home, it will help guide you and your practitioners as you determine a dietary strategy for your child.

Here are further details and resources on how to implement these two diets. SCD and gf/cf have very different underlying principles, and they are recommended for particular circumstances and needs, so dietary rules and implementation are specific to each diet. You will want to check with your pediatrician and



nutritionist as you are implementing diet so the three of you can mark improvement and changes and ensure proper nutrition.

GF/CF

When going gluten-free and casein-free, you need to beware of hidden sources — gluten or casein can be an ingredient *within* some processed foods and not be disclosed. With a few pointers it is possible to ensure you are fully avoiding these substances.



Sources of GLUTEN to Avoid

Gluten Grains

- Wheat
- Rye
- Barley
- Spelt
- Kamut
- Triticale
- Oats (commercial) – g/f oats are available

Sources of CASEIN to Avoid

Casein Found in Animal Milk Products (cow, goat, sheep, etc.)

- Milk
- Cheese
- Yogurt and Kefir
- Butter
- Cream, Ice Cream, and Sour Cream
- Whey

Gluten-containing Ingredients/Foods

- Semolina
- Malt
- Hydrolyzed vegetable proteins *
- Dextrin and Maltodextrin *
- Artificial flavors and coloring *
- Spices *
- Soy sauce (unless wheat-free) *
- Potato chips/fries *
- Sauces
- Gravies *
- Bologna
- Hot dogs *

** may contain gluten, unless specified gluten-free*

Casein-containing Ingredients/Foods

- Milk chocolate
- Sherbet
- Galactose
- Casein, Caseinate
- Lactose in seasoning
- Lactalbumin, as natural flavor
- Artificial butter flavor
- Cool Whip
- Lactic acid *
- Canned tuna *
- Seasoned potato chips *
- Hot dogs
- Bologna *

** may contain casein*



It's pretty easy to substitute your child's favorite foods with gluten-free options — gluten-free waffles, pancakes, muffins, and pasta are all readily available in stores. Organic gf/cf hot dogs and chicken nuggets are also pretty close to the original gluten-containing versions and are easy to substitute. At the beginning, these "transition foods" are helpful, but remember, children don't need "kid foods," and you can create a healthier diet by avoiding carbohydrate and processed products.

Breads are more difficult to substitute since gluten's texture makes bread more challenging to duplicate with gluten-free flours. As you try different brands of gf/cf bread, consider making some bread of your own. Gluten-free breads, with and without yeast, taste much better and have a fresher texture when made at home. You can make these homemade breads with or without a bread maker or any special equipment.

Many aspects of going casein-free are also easy to change: butter substitutes like ghee and coconut oil are delicious, healthy, and available in most health food stores. Regular cow's milk can be slowly diluted over time with dairy-free milk. Coconut yogurt is dairy-free and soy-free, casein-free puddings and ice creams are also nearly indistinguishable from their dairy versions.

Macaroni and cheese can be made fairly easily without any cheese substitute at all. Melted cheese such as on gluten-free pizza is harder to mimic because of its gooey texture. Fortunately, Galaxy Foods makes a vegan rice cheese that is free of casein, caseinate, and soy, which can be used when you simply must have pizza!

While there are lots of great products, to make it easier and give them a place to start, parents often ask me what brands I use. I use Breads from Anna® bread mix, So Delicious™ coconut yogurt by Turtle Mountain, and Coconut Bliss™ coconut ice cream (if you must have this sweet treat). Ghee and coconut oil come in many brands. A couple nationwide brands include Purity Farms Coconut Bliss™ ghee and Wilderness Family Naturals raw coconut oil. Rejuvenate Foods makes raw sauerkraut and other cultured vegetables available nationwide. Neocate® Junior by Nutricia is a nutritionally complete, powdered amino acid based medical food for nutritional support for children with very limited diets.

Remember to add a calcium supplement and other nutritional supplementation to ensure nutrient needs are met. A nutrition consultant or autism-specific physician can help guide you with these recommendations.

GF/CF Meal Ideas

Breakfast: Always try to serve a portion of protein such as eggs or sausage at breakfast. Try two or three of these ideas together, such

as scrambled eggs with bacon and a piece of fruit — unless breakfast already contains fat, carbohydrates, and protein such as french toast or a smoothie.

- Eggs (scrambled, omelet, or any style without milk)
- Store-bought breakfast sausage (with no nitrates/ites) or simply a homemade meat patty
- Bacon
- Gluten-free/casein-free waffle or pancake
- Gluten-free/casein-free toast with nut butter or ghee and/or coconut oil (butter substitute)
- Gluten-free/casein-free cereal or other gf/cf breakfast
- French toast (gluten-free bread)
- Organic fruit (Google the “Dirty Dozen”)
- Organic fruit smoothie
 - Non-dairy milk, frozen fruit (such as blueberries, bananas, peaches, and pears), honey, protein powder (if not in conjunction with other protein) or Neocate® Junior (for children with very limited diets), non-dairy yogurt

Lunch/Dinner: Include a protein, vegetable, some fat, and a starch (the starch is not necessary and is eliminated on certain diets). Have hot, leftover dinner for lunch by using a Thermos®.

- Grass-fed/pastured protein
 - Meatballs – ground beef, buffalo, lamb, or any meat
 - Burger – ground chicken, beef, turkey, or other meat
 - Gluten-free/casein-free, nitrate/ite-free hot dog or sausage
 - Homemade gluten-free chicken nuggets
 - Any roasted chicken or meat
- Organic Vegetables
 - Steamed or boiled vegetables with ghee or coconut oil melted on top
 - Stir-fry vegetables
 - Salad or carrot sticks
 - Raw sauerkraut
- Organic Fruit
 - Fresh fruit
 - Cooked into a sauce like apple sauce or pear sauce
- Starch
 - Gluten-free pasta
 - Sweet potato or potato fries
 - Rice or quinoa
 - Gluten-free crackers, bread, or rice cakes
- Additional lunch and dinner ideas
 - Gluten-free sandwich with sliced lunch meat
 - Gluten-free sandwich with sunflower seed butter and jelly (a peanut/nut-free PB&J)
 - Stews and soups – pureed or broth soup
 - Casseroles

Snacks

- Chicken nuggets or chicken pancakes
- Celery or apple with nut butter
- Vegetables with hummus
- Potato chips or other chips (ideally with guacamole or other healthy dip)
- Carrot chips
- Vegetable latkes with apple sauce on top
- Smoothie (or frozen into popsicles)
- Vegetable juice (freshly made)
- Gluten-free French toast strips with coconut oil and a bit of salt (not sweet if possible)
- Fruit or apple/pear sauce
- Rice crackers with casein-free cheese
- Black olives and dill pickles
- Turkey rollups
- Hamburger wedges dipped in gf/cf ketchup



Specific Carbohydrate Diet

It is best to start SCD with the introductory diet — those foods most easily digested — and to work up to more complicated foods as the gut has a chance to rest and heal. Once you are past the introductory stage, these are the SCD-compliant and non-compliant foods to work into the diet.

Foods to Avoid on SCD	SCD-compliant foods <i>(if no prior sensitivity)</i>
<ul style="list-style-type: none"> • Grains • Corn • Potatoes (white or sweet) • Products made from grains or starches (rice or potato milk) • Soy products • Certain beans: garbanzo/chick peas, black-eyed peas, butter beans, fava beans, mung beans, pinto beans • Bean flours • Molasses • Corn syrup • Maple syrup • Artificial sweeteners (including sucralose or Splenda) • Garlic and onion powder • Pasta • Cornstarch, arrowroot powder, tapioca, agar-agar or carrageenan • Pectin in making jellies and jams • Chocolate or carob • Ketchup • Baking powder (baking soda is fine) • Many supplements are not allowed because of SCD non-compliant fillers 	<ul style="list-style-type: none"> • Meat • Eggs • Non-starchy vegetables • Some beans: dried white (navy) beans, black beans, lentils, split peas, lima bean • Fruit and 100% fruit juice not from concentrate • Nuts • Honey • Nut milk • Nut flours • Coconut flour • Oils made from grains (such as corn oil and soybean oil) • Spices (of any kind except mixtures like apple pie spice and curry powder) • Ghee



“ It is important to work with a nutrition professional to make sure nutritional needs are met while following SCD. ”

SCD is not a low carbohydrate diet. Carbohydrates are important for children, so it is important to include sources of carbohydrates that are allowed on this diet, such as fruits, vegetables, certain beans and nuts, and yogurt (if consumed). While dairy is technically allowed on SCD, this diet was not originally developed for children with autism who have so many challenges with dairy. Most children will begin this diet without casein and then add it back later if tolerated. It is important to work with a nutrition professional to make sure nutritional needs are met while following SCD.

Because there are many starches, thickeners, and non-compliant sugars in store bought foods such as sausage, nut milks, and apple sauce, parents following SCD often prepare more foods from scratch than those following gf/cf. However, once you get the hang of it, it is fairly easy to do — and the foods are more flavorful with more natural enzymes, nutrients, and higher quality ingredients than their prepared-food counterparts.

SCD Introductory Diet

When beginning SCD, the introductory diet is followed for no more than three days. These initial foods are very basic and limited. They include:

- Chicken and beef broth
- Soup made with the introductory foods
- Meat — roasted, poached, and as chicken pancakes
- Fish
- Eggs
- Gelatin — homemade JELL-O®
- Cooked carrots

After these first few days, foods are added based on stages and ease of digestion. Fruits and vegetables should be peeled and cooked during these beginning stages. I encourage parents beginning the SCD diet to learn about the introductory diet and the diet's stages and progression at pecanbread.com.

Some children's dietary preferences are too limited to begin with the introductory diet. For these children, it is best to avoid the more difficult foods to digest, such as whole nuts, seeds, beans, dried fruit, meat jerky, and fried foods. In these cases, if you can loosely follow the stages, that's helpful.

SCD Meal Ideas

Breakfast: Always try to serve some carbohydrates with meals. Try two or three of these ideas together such as scrambled eggs with sausage or a vegetable omelet plus a piece of fruit.

- Eggs (scrambled eggs, an omelet, or any style without milk)
- Breakfast sausage or a homemade meat patty (with or without spices) is often best on SCD
- Chicken pancake (grain-free and nut-free)
- Banana pancake (grain-free and nut-free)
- Nut butter pancake
- Nut flour muffin
- Fruit
- Fruit smoothie: homemade nut/coconut milk, frozen/fresh fruit such as blueberries, bananas, peaches, and pears, honey, one tablespoon of melted coconut oil, non-dairy yogurt

Lunch/Dinner: Include a protein, some fat, vegetable, and other allowed carbohydrate. Have hot, leftover dinner for lunch by using a Thermos.

- Grass-fed/pastured protein
 - Meatballs – ground beef, buffalo, lamb or any meat with pureed vegetables
 - Burger – ground chicken, beef, turkey, or other meat
 - Homemade gluten-free chicken nuggets (with nut-flour)
 - Any roasted chicken or meat
 - Stews and soups – pureed or broth soup
- Organic vegetables/carbohydrate
 - Squash fries
 - Raw sauerkraut
 - Potato-free vegetable latkes
 - Cauliflower mashed “potatoes” or “rice”
 - Steamed or boiled vegetables with ghee or coconut oil melted on top
 - Bean burger
- Organic fruit/carbohydrate
 - Fruit cooked into a sauce like apple sauce or pear sauce
 - Fresh fruit



Snacks

- Chicken pancakes
- Celery or apple with nut butter
- Vegetables with homemade white bean hummus
- Carrot chips
- Vegetable latkes with apple sauce on top
- Smoothie (or frozen into popsicles)
- Vegetable juice (freshly made)
- Fruit or apple/pear sauce



There is no question that foods and nutrients can impact the symptoms of those with autism. Autism is a whole-body disorder; the gut-brain connection is an important and fundamental concept for parents to understand. The foods and substances that children eat directly impact what happens in their brain — and parents' and caregivers' food choices can also have a direct effect. These diet implementation basics can help you get started with these important dietary approaches.

With a little practice and familiarity, gf/cf or SCD can easily become a regular part of your family's health and healing program. Implementing diet can be fun and the introduction of new recipes can make mealtime enjoyable for everyone at the dinner table.

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Foods Your Child Can Eat on These Special Diets	
GF/CF	SCD
<p>Casein-free (and soy-free) Milk Substitutes</p> <ul style="list-style-type: none"> • Rice milk • Nut milks • Coconut milk • Potato milk 	<p>SCD Milk Substitutes</p> <ul style="list-style-type: none"> • Homemade nut milks • Homemade coconut milk
<p>Gluten-free Grains and Flours</p> <ul style="list-style-type: none"> • Rice • Quinoa • Amaranth • Buckwheat • Millet • Sorghum flour • Tapioca flour • Potato starch and flour • Nut and seed flours • Bean flours • Corn (organic only) 	<p>SCD Grain-free Flours</p> <ul style="list-style-type: none"> • Nut flours • Seed flours • Coconut flour • These are more advanced foods, so you mostly likely will not add these at the beginning. Nut butters can also be used to make pancakes and are often started before flours.
<p>GF/CF and SCD (soy-free and corn-free) oils</p> <ul style="list-style-type: none"> • Ghee (made from butter but casein-free) • Olive oil • Sesame oil • Coconut oil • Lard or other animal fat 	

Autism Diet & Nutrition Support by Julie Matthews

Nourishing Hope
Autism Diet & Nutrition Book

- The scientific rationale for nutrition intervention
- The role of genetics and environmental toxins
- The impact of nutrients on biochemistry and healing
- The most beneficial dietary options for autism



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Autism Diet & Nutrition Specialist

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