

## Autism Spectrum Disorder and Nutrition

<u>Common Feeding Problems</u>	<u>Example</u>	<u>How to help remedy</u>
<i>Pica – eating of non food substances</i>	Child may eat clay, dirt, ice, string, crayons, paper, cloth, etc.	Interdisciplinary approach recommended for behavior management; dietary management – diet assessment, lab values. Not all pica is related to diet.
<i>Rigid mealtime patterns or limited food repertoires</i>	Child may only insist upon foods of a certain color, e.g. orange-colored foods; or use of a particular plate; or a particular brand name of food	Offer new food items with preferred foods. Offer repeatedly over a period of months. Multivitamin/mineral supplement may be necessary during food jags.
<i>Aversion to textures</i>	Child may only want foods of a specific texture, such as liquids or soft texture	If presented as a feeding disorder, an occupational or speech therapist can be consulted for treatment.
<i>Difficulty adjusting to changes in the environment</i>	School lunch environment may be loud, distracting and overwhelming	If the child is not eating enough food, he/she may benefit from meals in the classroom, with an aide to minimize stimuli and allow the child to focus on the meal.

**Please note:** ASD is a spectrum disorder and these behaviors will occur along a spectrum. In addition, the signs and symptoms of ASD vary greatly amongst different children. This means that nutrition or feeding difficulties are not the same for all children with ASD. Each child must be considered individually. The treatment of complex feeding disorders and nutritional risk in this population must be handled by an interdisciplinary team.

## Alternative Diet Therapies

Alternative Therapy	Definition	Diet/Foods to Avoid	Has it proven to be effective in ASD?
<i>Gluten/casein free diet (aka GFCF diet)</i>	Diet free of gluten and casein	<p>Gluten – found in wheat and other grains, food starches, semolina, couscous, malt, some vinegars, soy sauce flavorings, artificial colors and hydrolyzed vegetable proteins. Corn and rice contain gluten but not gliadin, the offending substance. Read ingredients list to be sure.</p> <p>Casein – found in milk and milk products; may also be found in non-milk products such as soy cheese and hot dogs in the form of caseinate.</p>	Until well-controlled and designed studies can be done, it will remain unclear whether the gluten/casein free diet is a valid treatment for ASD, or simply a treatment for a co-morbid gluten/casein sensitivity in a subgroup of these children.
<i>Lactose free diet</i>	Diet free of lactose – natural sugar found in milk/milk products	milk and milk products are the only natural sources of lactose. Dry milk powder, whey, curds, and milk solids are common ingredients in processed foods (examples: lunch meats, cereals, candy, instant soups)	May alleviate GI symptoms if child is lactose intolerant
<i>Megavitamin therapy</i>	Nutrients provided in megadoses to prevent or delay symptoms of the disease state	Supplementation provided in megadoses	Difficult to interpret results as being beneficial to all children with autism
<i>Feingold diet – originally studied in ADHD</i>	Eliminates 2 groups: those with naturally occurring salicylates and foods known to contain artificial colors and flavors	Examples of foods containing natural salicylates: almonds, apples, apricots, currants, grapes, tomatoes, oranges, peaches, raspberries, etc.	No extensive studies have been carried out to determine the effectiveness for children with autism, testimonials support its use.

**Please note.** *There are currently NO recommended diet therapies for ASD. The goal for nutrition therapy in children with ASD is to meet their micro and macro nutrient needs through a regular diet, thus promoting optimal growth and development.*