

## Nutrition and Eating and Children with Autism Spectrum Disorder

Many children with autism spectrum disorder (ASD) are picky eaters. They may be very selective in the foods they will eat, resist trying new foods and avoid eating some foods due to the food's texture. A number of factors may account for this including where the child is eating; who is in the room; what foods look like, smell like and the texture they have; the child's strong preference for routines and resistance to change; and the child's level of anxiety with eating. A child with ASD who has a strong preference for routines may resist food touching on the plate or food mixed together such as in a casserole. Food may have to come out of a certain carton or box. For example, pizza must come out of a Little Caesar's box and must be covered with pepperoni even though the child removes the pepperoni before eating the pizza. Anxiety may also play a major role in a child's eating behavior. If a child has had a previous choking episode, s/he may be very anxious and resist trying the same or a similar food for a prolonged period of time.

### Questions:

*Will my child grow as expected?* As a group, children with ASD grow as expected and tend to be overweight rather than underweight. In fact, a recent study by the National Center on Birth Defects and Developmental Disabilities (NCBDD) reported adolescents with autism are about 2 times more likely to be obese than adolescents without developmental disabilities (2014). Some medications prescribed for children with ASD, for example, methylphenidate (Ritalin) and amphetamine salts (Adderall),\* can suppress appetite and have been associated with poor weight gain and less often with inadequate growth in height. Other medications, most notably risperidone (Risperdol) and other medications in the same group, can stimulate appetite and cause rapid weight gain and problems with glucose and fat metabolism.\*\*

*Is my child getting enough vitamins, minerals and protein?* Researchers have studied the diets of children with ASD. In general, the dietary intake of children with ASD is not very different from children who don't have ASD. Both groups tend to be low in calcium and protein intake as well as dietary fiber and vitamin D. The children with ASD who have very selective or restricted diets are more likely to have vitamin deficiencies. Children whose parents are following a special diet such as the gluten free casein free diet are more likely to be deficient in calcium, vitamin D, folate and grains.

If you are concerned about your child's diet, collect some data. A good place to start is with a 3 day diet record and analysis by a registered dietician or nutritionist. Your child's health care provider can assist you with this. I recommend families of children who have ASD and families of children who don't have ASD give their child a standard multi-vitamin daily that contains 400 IU of vitamin D.

*Does my child need a special diet?* A variety of special diets have been tried by some parents of children with ASD. One such diet is the Gluten Free Casein Free (GFCF) diet. Gluten is a protein that is in wheat and some

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other grains such as barley and rye. Some individuals (now estimated to be about 1 in 100 in the United States) cannot tolerate gluten and have a disorder called Celiac disease. Other individuals react to cow's milk and dairy products because they are sensitive to milk protein or because they are missing lactase, the enzyme that breaks down lactose, the natural sugar in milk. The rates of Celiac disease, milk protein sensitivity and lactase deficiency are the same in children with ASD and children who don't have ASD. In addition, research studies have generally shown no benefit for the GFCF diet in children with ASD.

There is more information on special diets and other complementary and alternative treatments in the handout, Complementary and Alternative Medicine and Children with ASD.

I recommend you present the same healthy, balanced diet to children with ASD as you do to your children who don't have ASD. If someone in your family has Celiac disease or your child has chronic loose stools or other gastrointestinal (GI) symptoms, talk with your child's health care provider. There is a good screening test for Celiac disease. If someone in your family has a history of milk intolerance or your child has chronic GI symptoms, consider a trial off dairy products. If you plan to try the GFCF diet, I recommend you start with elimination of dairy products first. Watch for positive effects over at least 3-4 weeks before starting elimination of gluten products. This way you will know which may have been more helpful, dairy elimination or gluten elimination. If you continue on a dairy elimination diet, you will need to supplement calcium and vitamin D. If you do plan to try a special diet, please review my recommendations in the CAM handout.

*How do I get my child to eat more or eat a more balanced diet?* A variety of interventions have been developed to address the eating problems of children with ASD. First, try to determine the factors that may be contributing to your child's eating pattern. Are there sensory issues; for example, lighting, sounds, or the texture of food? Are behaviors interfering; for example, hyperactivity, insistence on routines, anxiety?

Get some help. Ask your health care provider about a referral to a feeding therapist (this may be a Speech therapist or Occupational therapist) and a registered dietician or nutritionist. Address any sensory issues and develop a formal behavioral plan as needed. Plan to offer 3 sit-down meals and 2-3 snacks per day. Follow a regular routine. Start small and build on success, one bite at a time. Try giving a bite of a non-favored food before giving each bite of a favorite food. Interventions include the "one bite rule," "all done bowl," and "my plate."

More information is available in the handout, Guidelines for Picky Eaters.

*How can I help my child who is very anxious about choking?* Children who have food refusals due to anxiety about choking may need additional services. The feeding therapist can reassure you there are no problems with the mechanics of chewing and swallowing. A professional experienced in Cognitive Behavioral Therapy or CBT, however, may be needed to help your child identify the cause of his/her anxiety and begin to address it in small steps. These children also may benefit from treatment of their anxiety with medication, especially if they have more generalized problems with anxiety. Medications to treat anxiety include fluoxetine, sertraline

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and other selective serotonin reuptake inhibitors (SSRIs). Your child's health care provider can assist you in finding the right professionals to help you and your child.

*Further information for families:* Autism Speaks website,  
<http://www.autismspeaks.org/family-services/resource-library/diet-nutrition>

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