General Nutrition and Autism

Introduction

Children with autism can present with unique nutritional challenges and nutritional deficiencies have been described in children with autism spectrum disorders (ASDs). In addition to nutrition deficiencies, obesity has also been well-described to occur with ASDs. As a result, routine health maintenance with your family physician or pediatrician is essential to ensuring appropriate nutritional support for a child with ASD. Routine doctor visits allow for consistent measurement of weight and height; following these measurements over time and a detailed dietary history may help identify children with ASD who are at risk for nutritional problems.

Nutritional Deficiencies and ASDs

Various nutritional deficiencies have been described in children with ASDs. These can result from a variety of reasons such as narrow food preferences or specific food/texture aversions. In a study of 53 children with ASD between the ages of 3 and 11 years, food selectivity was common – including a limited food repertoire and food refusal. Frequent nutrient deficiencies were observed in the diet of these children with ASDs and included fiber, vitamin D, vitamin E, and calcium.[1] Other studies have reported poor protein intake, vitamin B12 deficiency, and iron deficiency in children with ASDs.[2, 3] Food selectivity has been shown to be an important risk factor in the development of nutritional deficiencies with ASDs. Children with a more restricted diet may be more likely to suffer from inadequate intake of nutrients and develop nutritional deficiencies.[1, 3]

ASDs and Obesity

In addition to nutritional deficiencies, children with ASDs are also at risk of excess body weight. Recent studies have demonstrated that children with ASDs are at least as likely as children without autism to become overweight or obese.[4, 5] Risk factors for obesity in children with ASD may include impairments in motor function that limit physical activity, as well as social impairment or rigidity to a specific routine that limits involvement in structured physical activity with peers. While food selectivity may predispose to specific nutrient deficiencies in the diet, it may also place a child with ASD at risk for obesity if calorie-dense foods are preferred.

What to Do if You Suspect Your Child with ASD May Have a Nutrition Problem

If you suspect that your child with an ASD may have a problem with nutrition, the first step you should take is discussing your concerns with your child's physician. It may be necessary to fill out an extended dietary journal to help identify areas of potential deficiency or excess of nutrient intake. Based on your history or diet journal, your physician may be able to determine if specific vitamin or mineral supplementation is needed.

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General Tips for Your Child with ASD and Food Selectivity

If your child has a limited number of foods he/she will eat, try some of the following basic steps:

- Introduce foods with a flavor or texture similar to a favorite food
    - Introduce strawberries if your child likes strawberry ice cream
    - Try low fat frozen yogurt if your child likes ice cream
    - Introduce fish sticks or fried vegetables if your child likes chicken nuggets
- Expose children to new foods gradually
    - Place new foods on the table only for the first few times, then perhaps on their plate without expecting them to try the food
- Do not force your child to eat all of a new food, allow experimentation
    - Allow only tastes, touch, or smell during introduction periods if needed
- Mirror desired behavior by eating new food as a family, talk about a new food positively
- Remember, changing behavior and/or accepting new things can take time, effort, and patience

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IMPORTANT REMINDER:

This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general information and not as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.

November 2013

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