

Practical Strategies

for Feeding Aversions in Children with Autism

A special creation for you from the team of Speech and Occupational Therapists at All About Speech & Language

or adults and children alike, mealtimes are known to provide rich sensory experiences, full of various smells, sounds, tastes, temperatures, textures, and interactions with others. Mealtimes can be very pleasant and fun experiences when sensory processing is going well. However, for many of our children with Autism, significant sensory challenges are often experienced including heightened sensitivities or sensory overload which turn mealtimes into very stressful experiences. Furthermore, difficulties with communication (verbal and nonverbal) and focus of attention pose additional challenges for a child with Autism and their parent at mealtime.

As a way of coping with the sensory and communication stresses associated with mealtimes, often our children with Autism develop strategies that may include trying to limit sensory input or withdrawing from the social and communicative demands of the meal by: being overly selective in their selection of foods/textures, becoming inflexible or trying to control the mealtime routine, refusing to eat or eating limited amounts so as to reduce the number of transitions with which they must cope, escaping the situation, covering ears or closing eyes, or repetitive/stereotypic behaviors to help manage this perceived "chaos". It is no wonder that this mealtime stress and inflexibility causes concern for parents who are working hard to ensure their child has a well-balanced and nutritional diet. Forcing your child to suddenly change his eating patterns or to eat specific foods doesn't help him to learn to eat and enjoy meals but rather creates added stress to an already stressful

experience. As a busy parent juggling many different roles and responsibilities, we hope that this resource helps to equip you with more manageable steps and at-home strategies for expanding your child's food inventory and breaking the cycle of feeding aversions.

Elements of Feeding:

There are a variety of motor, cognitive, and speech and language milestones that go hand-in-hand with feeding development. While these will not be outlined specifically, if you do have concerns about your child's general development, please seek further assistance from your child's physician who may provide a needed referral to an Occupational and/or Speech-Language Therapist. Assessments in these areas, and referrals made to other medical professionals (i.e. nutritionist, or ABA therapist for behavioral feeding support), can assist your child across his/her development in order to make sure he is growing and achieving the appropriate developmental milestones! It is important to understand the various components of feeding in order to identify any stages your child may be having trouble with that could be affecting their appropriate intake of food. These elements include:

Oral-Motor Components of Feeding:

The lips, jaw, teeth, tongue, along with certain reflexes, sucking/clearing, and swallowing are all vital parts of your child's ability to sustain proper feeding.

Stages of Swallowing:

There are 4 stages of swallowing which are important for successful

feeding, in which a child, or adult, may have impairment. Again, if feeding difficulties are suspected, please seek assessment from an appropriate medical professional.

Feeding Development:

Just like all areas of development, from infancy through childhood, children grow in their ability to eat a variety of foods and drink liquids. In early stages of toddlerhood it is quite common for children to demonstrate strong preferences and dislikes for certain tastes and textures. By two years old, toddlers are typically able to tolerate all food textures (chewy, crunchy, soft, pureed), and eat foods from all food groups. During this time, children should also be demonstrating the ability to use a spoon and fork, drink from a regular cup, and finger feed themselves independently. If a child over the age of 2 years old is not meeting these milestones, he/she may benefit from occupational therapy evaluation to identify underlying concerns.

Signs of a Possible Feeding/ Swallowing Disorder:

Presented below are some signs that your child may be struggling with specific feeding related issues. If you have these concerns, it is important to get your child assessed by the appropriate medical professional (i.e. a Speech-Language Pathologist who specializes in swallowing/feeding). This will confirm or rule out if there is an impairment contributing to the feeding issues as a whole or if the difficulty is more sensory or behavioral in nature

(best addressed by an occupational therapist or ABA therapist, respectively). There could be a larger problem at hand that may best be addressed by a trained professional, who can then guide you in the best plan for management.

Some of the more critical signs and symptoms to take note of include:

- Refusing to eat (i.e. in general or certain foods/textures), spitting out food, or taking a long time to eat a small amount of food (typical meals should take no more than 15-20 minutes)
- Frequent coughing, throat clearing, gagging, and/or choking while eating
- Excessive drooling
- · Pocketing food in the cheeks
- Trouble to coordinate chewing and swallowing resulting in food leaking from the mouth
- Vomiting and/or spitting up large amounts after eating
- An overall "wet sounding" voice or cry after eating
- Concerns with meeting appropriate rate of growth (height to weight comparisons given a child's age)
- Your child may demonstrate a motorplanning deficit which can add to mealtime frustrations if coordinating chewing and swallowing is a struggle or understanding how to make their hands work for scooping food and feeding themselves.

Practical Strategies to Try At-Home:

After we rule-out or begin to manage any underlying difficulties or true impairments in the structures and feeding process as a whole, then various strategies can be used in the home with greater success to shape positive feeding experiences and behaviors. Described below are three strategies that have proven to aid the introduction and acceptance of new foods. If your child is struggling during mealtime with his/her ability to tolerate new or varied foods, these strategies would be beneficial for you to incorporate into your routine.

3 Strategies for At-Home Support:

1. Pairing Preferred and Nonpreferred Foods with a Token System:

Positive reinforcement can be incredibly powerful in helping to reduce negative behaviors associated with mealtimes. When using positive reinforcement, it is key to praise positive behaviors and ignore negative behaviors. Positive reinforcement may include verbal praises, clapping, continued interaction with you, and/or immediately receiving a preferred item or other motivating tangible when a child completes what is desired. This focus on acknowledging and reinforcing only the desired behavior will slowly begin to extinguish undesired behaviors and teach your child a new action or behavior.

To get started, select a non-preferred food item that is developmentally appropriate and similar to a food already in your child's inventory. This will be your introductory item.

As your child attempts or completes a desired behavior with this non-preferred food item (see list of possible behaviors under "Desensitization" section, with the goal of working toward eating the item), immediately reward their attempt with a preferred food. Over time, this pairing of non-preferred foods immediately followed by a preferred reinforcer will lead to increased acceptance of the non-preferred item.

Positive reinforcement may also include using this token system paired with a visual behavior chart, which can help your child see and work toward a goal. For example, after each successful "pair" of accepting the non-preferred and receiving the preferred items, he may earn one smiley face or sticker on a visual behavior chart of 3 boxes. After 3 successful trials or "pairs" are completed, and 3 smiley faces earned on his behavior chart, he may earn an even larger reinforcer such as playing with a preferred toy. Alternate these



cycles of pairings, gradually increasing the number of target attempts and fading the reinforcement schedule (i.e. the child may now be expected to take 2 separate bites, then work up toward 3 separate bites before a reinforcer is provided. Or, perhaps you may increase the number of overall trials to be completed on the behavior chart before a final motivating reward is provided). Pairing a preferred food or drink in between tastes of a new or nonpreferred food item may help to reduce the aftertaste that many problem eaters find to be aversive. Overtime, less bites or sips of the preferred item are provided as the new food item becomes accepted.

Remember, have patience and don't give up your efforts; it may take on average at least 10 exposures to a new food paired with positive reinforcement before the child will accept the food on a consistent basis!

When using positive reinforcement, it is key to praise positive behaviors and ignore negative behaviors.

2. Desensitization

Desensitization is the process by which children are slowly and gradually introduced to new and/or non-preferred food items, with the goal of expanding the child's food repertoire through decreased defensiveness and increased tolerance. This progression takes place through repetition, rewards, and engagement. Follow the steps below to help desensitize your child to a new food:

Make lists of the foods and drinks your child will tolerate and foods you would like him/her to eat. You can organize foods by categories as well as by properties of the food (i.e. texture, size, color etc.). Select a "new" food item to begin the desensitization process; an item that is closely related with slight variations will have the most success at first (i.e. if your child already eats yogurt, consider pudding as a food to begin desensitizing to).

Begin desensitizing to foods at times other than main "mealtimes," for example during play, snack time, or within therapy sessions if your child receives support services. Perhaps you may play with toy food, feed it to dolls during pretend play, or cut out pictures of the food item from magazines. These fun experiences will help your child gradually view this item in a non-threatening way.

If the item is wrapped in specific packaging, work to have your child gradually grow comfortable looking at, touching, holding, or even just opening/ unwrapping the item. Eventually, when working to have your child tolerate touching this new food, use cookie cutters to explore the new food item, count or sort the food, or finally use the item to "paint" or create art with.

When the food item has become increasingly familiar and tolerated in play, start by simply having your child sit at the table with the food you would like him/her to eat, placed somewhere on the table. This step will adjust your child to the sight and smell of the new food.



After multiple sittings, as the child gets desensitized to the presence of the food on the table, gradually bring the food closer and closer to his/her plate until it is tolerated on the plate without any expectation to try it.

When the food is tolerated on the child's plate, begin to explore and "play" with the food by having the food touch a part of the body (i.e. arm, hand, fingers). Remember that desensitizing through food play will be separate from your child's meal time (until the food becomes preferred, and therefore added to a meal rotation.)

As the child tolerates having the food touch parts of his/her body, you can work toward tolerance near the face, cheeks, chin, nose, and lastly the lips. Perhaps your child can hold the item near his face or kiss the item.

As the child tolerates having the food touch his/her lips, you can work toward the mouth. First, have the child simply lick the item. If this is tolerated, work toward biting into the food, then biting and holding the food in the mouth for a few seconds before spitting it out.

An item that is closely related with slight variations will have the most success at first (i.e. if your child already eats yogurt, consider pudding as a food to begin desensitizing to).

Provided with plenty of positive reinforcement and repeated exposures,

from there have your child work to chew and spit the food out, chew and swallow, and eventually tolerate eating the food. At this point, the food will then get added into their meal rotation.

Keep in mind, as these stages are taking place, your child is still able to eat his/her regular preferred meals during usual mealtimes.





3. Food Chaining

When we think about our own eating habits, we most often eat what we like. Food chaining follows this idea and describes the process of introducing new foods to a child's diet by selecting items that have the same flavors or features as foods the child already eats or prefers. Because you build upon your child's existing preferences, this approach reduces the chance of an aversive response. By presenting new food items in a gradual way varying from an already "liked" item by only 1 feature at a time, you can slowly increase the variety of foods your child is consuming.

The first step toward successfully using this strategy is to create a list of foods that your child currently eats consistently; then create a list of foods (or a chain) of items that have similar features such as texture, taste, consistency, or temperature.

You will initially introduce new foods that your child is very likely to eat

because they are so closely similar to the items already eaten. Once these foods are tolerated, progress to the next level of the food chain by introducing foods that are similar to the items your child already likes but that have slightly different flavors and textures. Often, a food chain consists of 4 levels that build upon one another. By following the

levels of the food chain, the child will be able to build upon success with small changes. The levels are as follows:

Level 1: Maintain & Expand, Current Taste & Texture

Level 2: Vary Taste, Maintain Texture

Level 3: Maintain Taste, Vary Texture

Level 4: Vary Taste, Vary Texture

Please reference the two visuals: "Food Chaining-French Fries" and "Food Chaining- Chicken Nuggets" for specific examples of this leveled progression).

These food chains are fluid, flexible, and often branch off in different directions as your child accepts or rejects new foods and increases his tolerance of new tastes and textures. Create a new food chain for every food in your child's core diet, however only 2 or 3 foods are targeted at a time along with a slightly modified version of those foods which is offered once daily.

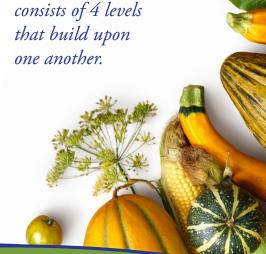
Consider adding sauces, dips, or condiments to your child's new food chains if your child is likely to tolerate them; sometimes these additions that may already be preferred can help mask the taste of a new food and better promote its tolerance. The amount of sauce used should be decreased over time until the new food is tolerated easily.

Continue slowly and steadily to expand your child's food repertoire.

Your ultimate goal is for your child to consistently eat a balanced diet that is full of new healthy choices and a wider variety of tastes and textures. This process requires small steps and it may take time to achieve these goals; remain persistent and patient in working toward this goal. You are working to build a trusting feeding relationship between you and your child and renewing the idea that mealtimes and eating are experiences to enjoy.

If you find yourself in need of support, a dietician, occupational, or speech therapist will be able to analyze your child's diet in depth and determine appropriate food chain progressions. They may have you use a Food-Chain Rating Scale to more accurately assess if the foods selected for the food chain are appropriate and in which order to present them.

Often, a food chain



Other Feeding Tips to Consider:

Pick a time when your child is calm or not feeling stressed or tired so you have the greatest chance for success.

It is very helpful to schedule mealtimes and food introductions at predictable times with as much routine as possible in the beginning (same location using a specific chair, spoon, place mat, etc.). When making changes in food, it will be important to maintain this familiar and predictable mealtime environment. Over time, we can balance the need for familiarity with the need for flexibility as we help the child accept small variations to this routine in order to widen the circumstances under which the child will eat.

Keep the environment as calm and stress-free as possible with few sensory stimuli that would contribute to a child's sensory overload; when children are calm and focused, they are more effectively able to process the communication and sensory challenges of mealtime.

Remove external distractors during feeding (i.e. tablet, TV, video games, etc.) that would reduce your child's desire to participate in this feeding interaction.

Rephrase how you verbally present items to eat or drink. Instead of asking what the child wants, tell him or her the options that are available to choose from during a meal (i.e. Do you want your smoothie in this cup or that cup?).

Offer foods that are nutritious and developmentally appropriate.

Remember, we want mealtimes to be fun, positive experiences; avoid engaging in a power struggle between you and your child, resulting in fights around feeding.

Offer and serve small portions of food.

Try to time your food introductions when you know your child is hungry.

Make sure your child is comfortable, seated in an upright position during feedings and providing him access to a cloth or napkin if he desires to remove unwanted food from his fingers or face.

Encourage your child to help in the preparation of food and/or serving the food at mealtime.

Get creative in the ways in which you talk about and engage with foods while eating without telling your child to "Take/ Eat Another Bite." Try asking instead:

- How loud/soft can you crunch?
- Which side do you want to crunch on?
- I can put my (food) in this sauce/spread!
- Which part of (food) do you want to bite first? (i.e. if food is in the shape of a fun cookie cutter like Mickey Mouse, dog, star etc.)
- Do you want to taste the (food) off the spoon or the straw? My finger or your finger? The carrot or the apple slice?
- Offer family members to try—Brother/ Sister do you want some (food)?
- Please give me another piece of (food)

Through the help of an Occupational Therapist, it may benefit your child to organize or warm-up his/her system through a variety of sensory-based activities (i.e. jumping, bouncing, deep pressure for calming, etc.) along with some oral motor massage, if your child presents with oral defensiveness, to alert his/her mouth to be ready for feeding. It may also be beneficial to provide opportunities for young children to develop positive oral experiences (i.e. mouthing a variety of toys or feeding utensils with different shapes and textures).

Consider masking the smell of a new drink by keeping it in a cup with a lid, or to reduce the smell of new food flavors, using chilled foods when first presented.

Keep in mind that a child's sensory reaction is real; everything a child does is a form of communicating to let us know what they are experiencing or what they need. We must work to figure out why a food was rejected so that we can offer the same food again in a different way (perhaps considering the original utensils used, the food's temperature, what part of the texture may be contributing to rejection, etc.). Observe your child carefully and notice what he or she is trying to communicate.

Remember to move slowly with "surprise foods." As your child grows more accustomed to tolerating a wider variety of tastes and textures, continue to expose him or her to new items as a normal part of mealtimes.

Moving Ahead with Hope:

We hope that this document has given you practical strategies and new tools to increase your confidence while putting the "fun" back into mealtimes! Try to reframe your perspective to think of a mealtime as an exciting opportunity for broadening your child's sensory experiences, eventually increasing their diet, and even simply allowing time for positive communication and interaction with your child. We recognize this process will require effort and persistence, and each meal may not be easy, but we encourage you to continue to find ways to be creative and remain patient, while also setting limits. If we continue to accommodate our child's selective or restrictive mealtime behaviors, these children will often continue to be picky eaters for longer periods of time, even into adulthood. With these strategies and a mindset of creativity and patience, we have the power to make baby steps toward new behaviors, while helping our children grow in their ability to tolerate and eat/drink a greater variety of foods and liquids!

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College of Behavioral & Community Sciences University of South Florida 13301 Bruce B. Downs Blvd., MHC 2113A Tampa, FL 33612

Call: 813-974-2532

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