

# FEEDING CHALLENGES WITH ASD

Maureen Bennie



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#### INTRODUCTION

Proper nutrition, a healthy balanced diet, and eating a variety of foods are of concern for those supporting individuals on the autism spectrum. Parents worry about a child who eats very few foods, never want fruits or vegetables, or eats from only one food group like carbohydrates. Educators feel concerned when they see a student eating processed foods at school which can result in energy spikes and crashes.

Some individuals have specific eating styles like grazing, food has to be presented and served in a specific way, and only certain colors, smells or textures are accepted. Eating times can be erratic or sporadic throughout the day. Food jags are also common where only one food is eaten for a period of time.

Oral motor function comes in to play as eating itself is a complex process. Eating involves how the mouth muscles function: how strong the muscles are, how well they coordinate the range of motion and how far they can move as they manipulate food in the mouth. Sensory oral-motor aspects around eating involve how the mouth tissues perceive sensory information such as the taste, temperature and texture of food.

Interoceptive awareness must also be considered as this eighth sense is the one that tells us when we are hungry, thirsty or full. The interoceptive sense may be impaired and directly related to eating difficulties. There are ways to improve the function of this sense.

Gut inflammation is a reality for many individuals on the spectrum as well as food intolerances. If a child has gut pain but cannot express what is wrong due to interoception impairment or communication difficulties, we may see challenging behaviors such as sleep issues, mood swings, emotional outbursts, or periods of high energy and not understand the reason why.

The subject of food is fraught with emotion because it's impossible to make a person eat something they do not want to. It is also a misconception to think a person will eat if they are hungry enough no matter what it served – this is usually not the case. Individuals on the spectrum may experience strong emotions such as fear and anxiety about food.

Whether in the supportive role of parent, caregiver, educator or support worker, it is important to recognize eating difficulties, understand and accept them, and find solutions to foster good eating habits and nutrition. A healthy diet with a wide variety of foods can take a long time to achieve, but it is worth working towards. Good health and well-being are the primary goals around eating.

Sincerely,

**Maureen Bennie** 

Hanun Berne

Director, Autism Awareness Centre Inc.



# FEEDING CHALLENGES AND FOOD AVERSIONS

#### HELPFUL HINTS FOR PARENTS OF CHILDREN WITH AUTISM

Picky eating habits are one of the most common complaints from parents of children with autism. Challenges can range from a limited diet where a child will only eat from a few food groups (like only meat and grains), overeating or not eating enough, oral motor difficulties that prevent proper chewing and processing of food, to sensory issues around food such as texture or colour, and digestive issues. Many parents find mealtimes frustrating, and become concerned about their child's nutrition, health and overall well-being due to feeding problems. Below is a list of some of the best tips I have learned over two decades of mealtimes with my two children on the spectrum:

- **1. Keep mealtimes calm and stress-free.** Avoid eating in a hurry or on the go, or feeling frustrated by how meals "generally" seem to go. Try to budget enough time for a relaxed atmosphere. That is not always easy when you are a busy family!
- 2. Set a routine for mealtimes. Individuals with ASD thrive on routine so create a set plan around mealtimes that is consistent and predictable. Choose a regular time and place for eating as much as possible.
- 3. Create a visual plan around mealtime. Some children feel anxious about when an activity will end so show them the steps of eating a meal and let them know when they will be finished. If you can, involve your child in food preparation so they become part of the meal preparation process. This creates a predictable routine and involves the child in the meal process.
- **4.** If your child prefers to eat alone, investigate the reason for this. I know one adult on the spectrum who cannot tolerate the sound of other people chewing so she can only join her family for meals if she is wearing noise-cancelling headphones.
- **5. Teach rules around food serving sizes if you have a child who over-eats.** For example, our son used to sneak a bag of his gluten-free cookies and eat them all in one sitting. We taught him a serving size was 6 cookies and he now follows that rule by counting them out and placing them in a bowl.
- **6. Look for signs of food intolerances.** Things like a bloated stomach, diarrhea, changes in bowel movements (frequency, color or smell), headaches, constipation, sleep disturbances, or acid reflux are not normal parts of healthy digestion, and may be a sign of food sensitivity. There may be a physical cause for your child's avoidance of certain foods.
- 7. If you do suspect there are food intolerances, keep a food journal so problem foods can be identified. It can be hard to track what foods are causing issues, and sometimes it's not one food but combinations. Keep a journal and then take that with you to your doctor. Also, consider visiting a dietician if there are food intolerances, or you suspect food intolerances. In our case, it was a dietician who discovered our children needed to follow a gluten-free/casein-free diet. They have been on this diet since they were a year old, before they were diagnosed with autism.
- **8. Allow time to explore new foods.** When introducing a new food, allow the child time to explore it and get used to it being on the plate. It takes approximately 20 exposures to a new food before a child will try that food.

- **9. Avoid feeding your child at least 2 hours before bedtime.** Nighttime snacking can cause sleep disturbances and make it more difficult for the child to fall asleep.
- 10. If the child will only eat certain textures: consider having an assessment done by a speech pathologist or occupational therapist. There may be an oral motor problem that makes chewing and swallowing difficult or sensory issues that need to be identified.
- **11.** If the child follows a limited diet: consult a physician about supplementation of vitamins and minerals. A person has to eat a wide variety of foods to get the required daily intake of nutrients and this does not always happen with people on the autism spectrum.

Finally, talk to other parents and ask what works for them or what they struggle with when it comes to eating. It will offer you support, and a group of parents putting their heads together come up with great solutions and sources of information!

#### For further reading:

- Just Take A Bite
- ☐ Improving Speech and Eating Skills in Children with Autism Spectrum Disorders
- ☐ Can't Eat, Won't Eat



# EXPLORING A GLUTEN FREE/DAIRY FREE DIET

## I WOULD LIKE TO START THE GLUTEN FREE DIET/DAIRY FREE DIET WITH MY CHILD WHO HAS AUTISM. WHERE DO I BEGIN?

As parents of children with autism we often try everything we can to help. In my family, moving my oldest child Marc into a gluten free / dairy free diet helped enormously with his sleep, getting rid of gastrointestinal comfort and elimination issues, and improved his mood.

Although moving to a gluten free/casein (or dairy) free diet (GF/CF) may not be the answer to all of your child's challenges, it can help in a variety of ways in about 20% of children with ASD. The good news is you'll know in about 6 weeks of starting the diet if it is having a positive affect on your child.

#### What is a gluten free/casein free diet?

The diet involves removing all food items that contain gluten or dairy. Gluten is a protein that is found in wheat, barley and rye, as well as spelt, so any products made from these items will have gluten in them. As an aside, most grains including oats can be cross contaminated with gluten items processed at the same factories. If your child is genuinely gluten intolerant (celiac), you will need to be very careful to get "gluten free" oats or other products such as baking powder that are specifically marked gluten free.

Casein is a protein found in milk. Dairy products such as yogurt, cheese, butter, and sour cream will have casein in them.

## How can a gluten free/dairy free diet help autism?

<u>Well documented studies</u> have shown that children with autism experience gastrointestinal (GI) upsets such as constipation, diarrhea and sensitivity to foods six-to-eight times more often than do children who are developing typically.

Aside from making someone painfully/physically uncomfortable, gut issues have been shown to deeply affect those with ASD. GI symptoms were found to be related to behavioral problems, including social withdrawal, irritability and repetitive behaviors. There are cases of children with ASD making significant progress once their GI issues were treated.

## How do I transition my child with ASD onto a gluten free/dairy free diet?

Taking out easy go-to snacks and favourite foods can be a tough challenge for both parent and child. Some children have no problem switching up their diets, but others have food aversions, sensory issues, and behavioural challenges that can make it difficult.

- Make sure you have the support you need for the transition.
- Introduce new foods during calm, stress free moments.
- Give your child time to explore any new textures and tastes.
- I have written a blog post with helpful tips on food aversions and eating challenges <u>here</u>.

Reading about the diet is a good place to start to understand what needs to be eliminated from the diet, the commitment involved, and how to implement and monitor the diet and its effects. Keeping a food diary during the transition can be very helpful as well to track changes and/or reactions.

## What foods should I use for a gluten free/dairy free diet?

There is much more awareness around this diet these days, and many GF/CF products can be found at large grocery stores or online for reasonable prices. There are lots of alternatives for gluten.

- Try using bean-based recipes and baking with alternative flours such as quinoa, rice, or potato flour.
- The rice pasta that is available now is just as good as the flour based type and it is excellent in casseroles or salads.
- Avoid processed foods because many of these items contain both hidden gluten and dairy products and the ingredient list may not readily identify them as GF/CF. If it isn't labeled as such, it more than likely isn't.
- Almond milk, rice milk or coconut milk is widely available and nutritious just be aware of added sugars in some brands.
- There are reasonable dairy-free cheese substitutes that melt. You can buy premade frozen gluten free/dairy free pizzas, or just buy blocks of their "cheese" and make your own.
- I find coconut yogurt and ice cream as delicious as the "real thing", or you can make fruit ice cream with no dairy in it at all. Just blend frozen banana with berries and a little non dairy milk in your food processor or blender. You can add chia seeds or almond milk for a little added protein depending on your child's tastes.

#### For further reading:

- Autism: Exploring the Benefits of a Gluten-and Casein-Free Diet – A practical guide for families and professionals
- ☐ <u>Diet Intervention and Autism Implementing the Gluten</u>

  <u>Free and Casein Free Diet for Autistic Children and</u>

  Adults A Practical Guide for Parents



## GLUTEN FREE/DAIRY FREE DIET FOR AUTISM

#### **MY EXPERIENCE**

Those of us who have children with autism normally try many things in our journey to help our kids. In the past 15 years, diet has been explored more and more with excellent outcomes for many children. Children with autism often experience symptoms like chronic diarrhea, headaches, stomach cramps, poor sleeping patterns, and irritable behavior. My son experienced all of these symptoms. After spending a year working with a gastro-intestinal specialist and finding no concrete answers, I finally turned to a dietician for help. She held the key to a better life for my son, Marc.

## Start by keeping a food diary for your child

I started keeping a daily food diary recording everything Marc ate and what symptoms occurred. A pattern began to emerge of reoccurring symptoms after he eat anything that was a dairy, soy, citrus, or gluten product. I had read a possible theory that the reason why foods containing gluten and casein, found in dairy products, are hard to digest for autistic children is because they are often functioning in an over-stimulated state. This over-stimulated state directs the blood flow out to the limbs for the "flight or fright" mode away from the digestive track making hard to digest foods like gluten and casein even more difficult to break down. Even though this is a theory, it made sense to me because my son was tested for allergies and all of the foods that bothered him did not show as an allergy. Is it just simple food intolerance? Marc seemed to have too much in common with other autistic children to dismiss his eating difficulties with just a blanket statement like, "He has food intolerances".

## What to eat on a gluten free/dairy free diet?

Marc has had great success on his limited diet. The question most parents ask me is, "So what does he eat?" That was the scariest part of eliminating so many foods from his diet. My dietician helped a great deal in making the dietary switch and where to find these new foods.

Marc eats rice products in place of gluten products. Some of the rice products I use are rice pasta, rice bread, rice noodles, rice crackers, rice cakes, puffed rice cereal and I bake with rice flour. Corn products also agree with Marc so he is able to eat puffed corn cereal, corn itself, corn chips and corn pasta.

For the substitution of dairy products, I use rice milk. One must be careful about buying any type of processed food as it may contain milk. Some examples of foods that may contain milk but you might not think they do are soup mixes, batter-fried foods, margarine, baked goods, instant mashed potatoes, cakes and cookies. I tend to stay away from all processed foods unless I see a label that states "gluten and dairy free". Read all labels carefully even if you know that food to be free of problem ingredients. Many food ingredients change with no warning to the consumer.

Where do you find all of these foods? Most large grocery store chains now have gluten free, dairy free or organic products. Health food stores will carry a variety of these products but the price tends to be higher than a larger grocery store chain. In my city, we have an allergy/organic bakery that makes rice flour based baked goods daily. Many of the rice products that I mentioned are also available in Asian supermarkets or in the ethnic aisle of your grocery store. Rarely in a larger center have I had any trouble finding any of these specialty products.

## Limited diets can work well for children with autism

The gluten free / dairy free diet has really agreed with Marc. His weight is much better now and he gains at a good rate. When his blood work is done, he is not deficient in any nutrients. His diarrhea problem is a thing of the past. Marc sleeps ten hours a night whereas before the diet he was waking up crying five times a night and not wanting to be held because he was in pain. I also have a daughter with autism and put her on this diet when she was a year old as she was beginning to exhibit some of the same symptoms Marc had when he was her age. Our family has followed this diet successfully for 22 years now.

Has eliminating gluten and dairy from my children's diet improved our family life? The answer is yes. In the last 15 years, specialized diets have become much more mainstream, and restaurants often have gluten free or dairy free options. Altering your child's diet may not be the answer to the problems your child is experiencing, but it is a non-invasive way to try and improve the quality of life of your child. They are also other dietary options other than gluten free or dairy free – check out the links in the Medical Links section of our website.

Children with autism often experience symptoms like chronic diarrhea, headaches, stomach cramps, poor sleeping patterns, and irritable behavior.



### FOOD, GLORIOUS FOOD

#### **EXPANDING THE DIET OF INDIVIDUALS WITH ASD**

I receive a lot of mail on the subject of diets. Parents are concerned about a child who eats very few foods, never want fruits or vegetables, or eats from only one food group like carbohydrates. Educators feel concerned when they see a student eating processed foods at school which can result in energy spikes and crashes. The subject of food is fraught with emotion because it's impossible to make a child eat something they don't want to. Everyone worries if the child is getting enough nutrition for optimal development on a limited diet.

We know gut inflammation is a reality for many of these children as well as food intolerances. If a child has gut pain but can't express what is wrong due to interoception problems or communication difficulties, we may see challenging behaviors such as sleep issues, mood swings, emotional outbursts, or periods of high energy and not understand the reason why.

An acquaintance of mine, Dr. Bonnie Kaplan, was awarded the Rogers Prize in Complimentary Medicine for proving that treating mental health challenges (explosive rage, mood symptoms, and anxiety) with balanced, broad-spectrum nutrient treatment formulas was more effective than using a single nutrient to treat these symptoms. She also provided the initial ground-breaking data that showed that treatment with carefully constructed formulations of broad-spectrum micronutrients could be used instead of psychotropic drugs to treat bipolar disorder and attention deficit hyperactivity disorder (ADHD). Dr. Kaplan's focus on the importance of improving nutrient intake to prevent and treat psychiatric symptoms is further proof of how important a well rounded diet is.

I am all too aware of the diet dilemma. Both my son (23) and daughter (21) have had very limited diets for many years. Even giving them daily supplements, I still worried about what they were eating. I tried many times to introduce new foods with no success. All of that changed for my son, Marc, at the age of 16. He now eats a very broad diet filled with fruits, vegetables, meat and some gluten free carbohydrates.

## How did I get my children with ASD to expand their diets?

#### 1) Repeated exposure

When Marc was 13, he began to work at a local Farmer's Market every Tuesday. He was exposed to vendors selling all kinds of produce in a sensory friendly environment. The market was outdoors in natural light with no loud music. The produce displays were small and each vendor only had a few items in their stalls. Marc began to connect with the vendors and feel a sense of pride working at this job. He was then more open to trying foods he had seen "at work".

Marc now volunteers at a food bank. He does the shopping, shelving and categorizing of these items. This has exposed him to an even wider variety of foods and he sees these food repeatedly as the shopping list stays fairly similar every week. This combination of working and associating certain foods with work has increased his acceptance of even more foods. Seeing the same foods every week has made them familiar, and it has been a discovery on his own terms without parental input.

#### 2) Growing and cooking food

Becoming more involved with the growing and preparation of food can create a connection to it. I enrolled Marc in a horticulture class in August. Students are involved in the growing and harvesting of the produce. They make something fresh to eat each class. Marc now loves potato salad. Last month, he ate kale salad with goat cheese. He wants to do what the rest of the rest of the class is doing. He feels connected to the food he is eating after picking it, washing it, and preparing it.

My daughter, Julia, has an at home baking program and also bakes for an organization's weekly meetings. While she still only eats a few things that she bakes, she is getting a chance to handle a wide variety of ingredients like eggs, salt, butter etc. She takes great pride in what she bakes. It also helps to connect her socially with the people she is baking for. In time, she may get more adventurous with eating different foods after repeated exposure on her own terms.

#### 3) Trying foods in other forms

Sometimes a food will be more readily accepted and tried in another form. Often an aversion is not to the taste of the food itself but to some other aspect such as presentation or texture. Some people prefer cooked produce to raw or vice versa. Julia won't eat a fresh tomato, but she will eat tomato sauce on pasta. People are often fussy about eggs – I would never eat a poached egg but love them scrambled or in an omelette. Try experimenting with food in different types of presentations. Marc now loves a stir fry with a wide variety of veggies in it including peppers and zucchini – foods I thought he would never eat.

#### 4) Improving oral motor difficulties

Oral motor difficulties can interfere with eating. If a child is having trouble chewing food into a ball in order to swallow it, food made be rejected. Marc used to have this problem with meat. Be observant on how food goes into the mouth. Marc puts everything in sideways to make contact with this molars first, so eating chicken wings is impossible or corn on the cob which both require contact with the front teeth. I do offer chicken and corn in other forms and they are eaten.

There are exercises and activities to improve oral motor difficulties. The oral motor skills to work on are awareness, strength, coordination, movement, and endurance of the lips, cheeks, tongue, and jaw. When these skills improve, speech and eating develop.

#### 5) The LILA Principal in the kitchen

I've written about the LILA Principal – Leave It Lying Around – to foster self-discovery and independence. Store food in clear containers. Label cupboards and shelves with visuals. Organize foods in categories and create some kind of system that makes sense to the child. We have a snack drawer where all the snack foods are kept. Have foods prepared ahead of time like cut up vegetables or cut cake into squares to make it easy to just grab and eat. Make things more enticing or that appeal to an interest. Does your child have a favorite shape or color? Do they have a favorite object or item that you could place the food near? Maybe Thomas the Tank Engine could sit on the edge of a bowl with apple slices.

Marc tried strawberries for the first time after hearing a song called Winter Berry from Bear in the Big Blue House. We were in a restaurant for breakfast and there were berries on the plate. I thought Marc would not be happy seeing this intrusion but to my surprise, he picked up a strawberry, placed it in the palm of his hand, and sang the Winter Berry song. At the end, he popped the strawberry into this mouth and a berry lover was born.

## Where to get help for a child that struggles with eating

If your child struggles with eating, seek a consultation with a speech language pathologist or occupational therapist. They can provide an assessment and make recommendations for strategies to help improve feeding skills. Dieticians can also help with increasing nutrient intake and reshaping the diet.

Broadening the diet takes time, patience and creative thinking. What has worked for my children may not work for another child, but these are a few things to think about in this process. Be patient because you never know when the day for change will come. I waited for 16 years but sowed the seeds for change previously for many years.

#### For further reading:

- ☐ Improving Speech and Eating Skills in Children with Autism Spectrum Disorders – An Oral Motor Program for Home and School
- What to Feed an Asperger: How to go from 3 foods to 300 with love, patience and a little sleight of hand



## ORAL MOTOR FUN - TIPS FROM MAKE & TAKE WORKSHOPS

#### **BY SHIRLEY SUTTON**

Nothing causes more exasperation to an already stressed out parent of a child with special needs than the child who makes mealtimes a disaster! In my 25 tears as a pediatric occupational therapist, and a mother of three children, I know firsthand how developing socially acceptable eating and drinking skills promotes quality of life.

In this section, I will share my "favourite four" clinical tips which will help restore the 'fun' around mealtimes. These tips are drawn from a variety of theoretical backgrounds, including sensory processing, Floortime/RDI, behavioural, neuro-developmental ("NDT"), and developmental pre-speech approaches.

#### 1) Fun first!

If your child does not engage readily in face to face play, he has likely missed a great deal of stimulation to the cheeks, mouth, lips and teeth. Think of baby games such as blowing raspberries, sticking tongues in and out, making silly faces in the mirror and singing. I teach parents a family favourite song I created, "Funny Faces". This type of play builds muscle strength in the lips, cheeks and tongue, as well as addressing the core deficits of ASD, such as attention, eye gaze, imitation and social referencing.

## 2) Know your child - sensory and motor differences must be considered!

Ask your speech pathologist or occupational therapist for assistance if you are unsure of your child's responses. Once you recognize your child's hypo or hypersensitivities, you can plan activities accordingly.

When low muscle tone is present, general alerting input is called for. This may include using strong tastes, cold temperatures, crunchy textures and/or strong muscle work (gum chewing) to "wake up" the mouth. Sour tastes are alerting (sour candy/popsicles, lemonade) and spicy, bitter foods are most alerting (taco sauce, cinnamon hearts). Frozen cold things are alerting (frozen grapes, ice chips, and popsicles). If, on the other hand, your child is a sensory avoider, they may over react to subtle taste, temperature or texture differences. You will need to provide more gentle challenges. Start with expanding their toy tolerances rather than food.

#### 3) Toys for mouth play are everywhere!

The mouth and tongue are a young child's "tool of identification". Everything goes to mouth to taste, squeeze, and feel. Jean Ayres, the Occupational Therapist and founder of Sensory Integration (SI) Theory, coined the phrase "feed the need". Clinically, if a child is bringing toys or fingers to the mouth, there is a sensory need going on that you need to recognize. By providing a wide variety of sensory experiences with mouth toys, this develops sensory awareness and skilled movements needed for eating, drinking and speaking. Of course, safety is the first consideration before encouraging any toys for mouthing. Choose larger toys if general tongue and lip exploration is wanted. If trying to encourage more chewing and texture tolerances, use toys with smaller pieces that will fit back on the molars. Look for favourite theme toys for older kids. A few of my favourites include: mirror mouth play, straws (regular, curly, and whistle straws), blowing bubbles (there is a huge variety of bubble making toys at the dollar stores), blowing musical instruments, blow pens, vibrating toys, face paint, and puppets.

#### 4) Incredible edibles

I always include activities that are fun with food, but that don't necessarily involve eating. This provides non-threatening exposure to smells, sights and feel of certain food, without necessarily tasting it. As a "Make & Take" workshop activity, we make a Smelly Guessing Game, which appeals to all noses. When promoting Art with Attitude, paint with mustard, ketchup, and frozen juice straws. Check out recipes for edible playdoughs in the book <u>Building Bridges</u>. I demonstrate several other excellent fine motor activities using edibles; e.g. Taste the shape, Follow the Tongue. These art activities are inclusive for those children who are into oral seeking, or "everything goes into my mouth" stage. Often parents and educators find this stage in older children most frustrating.

I trust these 'favourite four" clinical tips will help you and your child on your journey. Remember:

- 1. "Fun first"
- 2. Know your child's sensory needs
- 3. Provide lots of mouth toys and opportunities
- 4. Food is for fun too not just eating!

#### For further reading:

Building Bridges Through Sensory Integration:
Therapy for Children with Autism and Other Pervasive
Developmental Disorders (3rd. Ed.)



# WHAT'S COOKING? LIFE SKILLS FOR KIDS WITH AUTISM!

Cooking can be loads of fun to do with your kids. It's a great way to teach some independence and give your child some control over their diet. For those of us with children on the spectrum, cooking can seem like a daunting task, but it doesn't have to be! Teaching my kids to cook has been one of the more rewarding challenges in my life and offers some great quality time for all of us. I've also noticed that my kids are more likely to eat something if they had been involved in the preparation process.

In order to get the most out of the experience for both parent and child, it is important to understand the four main challenges when teaching cooking to kids with autism. These challenges were laid out for me by <a href="Penny Gill from her website and lecture Cooking with Autism">Penny Gill from her website and lecture Cooking with Autism</a>, and they were essential to our success.

#### 1) Sensory challenges: touch and smell

Sensory challenges faced in the cooking realm are aversions to certain textures like a slimy texture – the feeling of raw meat or a peeled hard-boiled egg. Penny suggested wearing non-latex medical gloves because they are thin and still provide sensory input. Use an onion slicer with foods such as an egg to avoid having to handle the food item.

If your child is young, try exposing them to play situations with various textures such a Magic Sand or slime to de-sensitize them. There is a great book called *Fun with Messy Play* that has many ideas and recipes for making items to introduce textures.

Certain smells can also be challenging such as onion fumes. People with ASD are often more sensitive to smells. If onions are a problem, try using Vidalia or Sweet Colossus onions because they emit fewer fumes. Refrigerating an onion before cutting it cuts down on the smell too. Penny showed us <u>onion goggles</u> which look like swimming goggles but you can see perfectly fine out of them. They protect the eyes from onion fumes. My daughter wore these goggles in her culinary arts class at school. What a great idea!

#### 2) Motor challenges

Motor challenges tend to be under-addressed and less obvious, but paramount to cooking. Lower muscle tone affects forearm strength which is needed for cutting. Underdeveloped fine motor skills affect how a person holds utensils. Problems with gradation impact how much pressure is needed for different activities such as slicing bread as opposed to a tomato, grating a lemon vs. cheese, etc... There is difficulty with modulating pressure, coordination of arm movements like for tossing a salad, and adjustment of movements for a task like peeling an apple. Adapting a movement can be difficult.

These challenges are not insurmountable. They can be addressed by how the skill is taught. One suggestion is doing a physical demonstration beside the person, not in front of them, using line drawings, and verbal prompts or cues on how to perform a task functionally. Hand over hand support can help with movement and gradation issues. Try different types of the same utensil because some work better than others. Don't remove hand over hand support too early because incorrect motor habits can result. Remember that hand over hand is meant to be supportive and not for forcing a person to do something.

**An important note about correcting a person:** By the time people with ASD reach adolescence, they are often discouraged by making mistakes because of their long history with them. It is better to provide the necessary support so the person performs the task correctly rather than letting them make a mistake, then correcting them. One to one support can really help with this.

If your child is having issues with your regular tools, think about using alternative utensils to ones you know: use a garlic twist rather than a garlic press, use a microplane for zesting rather than the big square grater, peel an orange with a <a href="Tupperware Orange Peeler">Tupperware Orange Peeler</a>.

#### 3) Following directions

Processing information is difficult for people with ASD so recipes need to be broken down into manageable parts.

- First, list the utensils and appliances needed.
- Then list the ingredients in their full form, not the way they need to be put into the recipe (ex. rather than say diced, peeled, sliced, etc., say one carrot, one apple etc.)
- Now list the instructions and break them down into manageable steps. Yes there
  may be 3 pages for a recipe, but there is also the chance for cooking independence
  which is the goal.

#### 4) Be creative with food aversions

How do you handle food aversions and other eating challenges? Find something similar to something they already like. If a child likes spice cake then try carrot cake. Often an aversion is not to the taste of the food itself but to some other aspect such as presentation or texture. I love eggs but will not eat them poached or soft-boiled because I hate the texture of a soft yolk. I do enjoy them scrambled.

## Cooking and sharing a meal is a great way to develop social skills

Learning how to cook is a skill that can lead to greater independence and possibly a job within the food industry. It can also be a way to make community and family connections. Churches, clubs and organizations have pot lucks, communities have bake sales for fundraisers, and families have get-togethers and are often asked to bring a dish. What a sense of accomplishment to be able to contribute in a meaningful way!

Learning how to understand and target these challenges made me feel empowered and motivated to get my son and daughter more involved with the cooking at home. Children are more apt to try a new dish they've made themselves, thus expanding their food repertoire. By including them in meal preparation, they have a greater connection with what they are eating and it gives them one more step towards independence.

Visit Penny's website at <a href="www.cookingwithautism.com">www.cookingwithautism.com</a> to learn more about her cooking school, buy her cookbook, or try some of her recipes. Any community could get a program like this going with the right instructors. Penny is also very open and willing to share her ideas.



# INTEROCEPTION AND AUTISM

#### **BODY AWARENESS CHALLENGES FOR THOSE WITH ASD**

Most of us know about the seven senses – sight, hearing, smell, taste, touch, <u>vestibular</u>, and <u>proprioception</u>. There is also a lesser-known sense, the eighth sense, called <u>interoception</u>. This sense helps a person understand what is going on inside of the body like hunger, thirst, feeling hot or cold, fatigue, or a full bladder. It also affects the ability to interpret emotions; butterflies in the stomach may not be felt as anxiety or nervousness. Not understanding this sense can make self-regulation a challenge. It can also be the cause of eating and <u>toileting difficulties</u>, something we frequently see in people with autism.

#### What is interoception?

Muscles and joints have receptors that tell you where your body parts are. <u>Interoception</u> works much the same way, but the receptors are in your organs including your skin. These receptors send messages about the body to the brain, helping to regulate vital functions such as hunger, thirst, digestion, or heart rate.

Understanding these bodily feelings can help with interpretation of what's going on inside the body. If your bladder is full, you need to urinate. If your heart is beating fast, you may need to take a few deep breathes to slow it down.

## How can interoception issues make things difficult for those with autism?

People with ASD may have difficulty making sense of this information. They may not be able to tell when they are feeling pain or fatigue. An itch may be felt as pain or pain may feel ticklish. They may not get the feeling of having to defecate and hold on to a bowel movement, which can lead to constipation.

Interoception also affects the interpretation of emotions. Emotions may not be "felt". If you can't tune in to the body cues that help interpret emotion, it's harder to identify the emotion. It's important to understand this aspect, because not feeling emotions affects a person's behavior. For example, a child may not recognize fear because he doesn't recognize that tense muscles, shallow breathing and a racing heart equals fear. My daughter recently told me that when she was in elementary school, she could only feel happiness or just "blank". This lack of interoceptive awareness could explain explosive behavior because it's not until the emotions are so big that an eruption occurs.

This is a short introductory video on interoception that explains what it's all about.

## Interoception challenges and difficulty with self-regulation

Interoceptive challenges will also affect the ability to self-regulate. If you don't know that you're hungry, thirsty or have a full bladder, you may feel uncomfortable but not know why. Frustration can build when you can't explain what is troubling you.

When the interoceptive sense is impaired, certain responses may not be regulated. For example, this could be the reason why an older child wets the bed. Not feeling "off" can lead to a meltdown. The real source of discomfort can't be pinpointed. It's important to be aware of this fact in order to discover the source of unexplained behavior. For example, when someone tells me a person is chewing on a hard object like wood, the first question I ask is about dental care. Could there be a cavity? Tender gums? A piece of food stuck between the teeth?

I can remember my good friend, <u>Judy Endow</u>, telling me about a 9 year old girl who kept banging her head so much that she required a helmet for head protection. She actually had head lice that no one had detected. Once that was solved, the head banging stopped.

My daughter once pulled her hair out all around one ear, completely bald. She was later diagnosed with an ear infection. She had never complained or cried to me about the pain.

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# What can we do to help individuals with autism develop body awareness/interoception?

- 1. The Multidimensional Assessment of Interoceptive Awareness (MAIA) is a questionnaire which measures IA with eight different scales. This has also been translated into several languages. There is a research article on how this MAIA was used in a 3 month study, but not related to ASD.
- 2. Kelly Mahler's book, *Interoception The Eighth Sensory System*, is one of the best introductions to understanding this sense and how to build body awareness individuals with ASD. She also created a curriculum for professionals *The Interoception Curriculum*.
- 3. <u>Mindfulness</u> and meditation may also be helpful. Our son dedicates time twice a week to meditation to help himself relax and re-energize.
- 4. <u>Sensory diets</u> can also help an occupational therapist can create a sensory diet that raises body awareness.

- 5. A child can learn to pay attention to their body's signals, recognize patterns in those signals, and then identify each with a particular emotion. These connections can be made through using a body check chart.
- 6. I also like these body awareness activities used in relation to the body check chart from Raising an Extraordinary Person:
  - Point to different body parts on your child's chart and have them wiggle that body part on their actual body. This shows you that your child understands their chart and how it is connected to their body.
  - Play a game of Simon Says using the chart. Use actions like clench your fists, breath really hard, touch your heart, etc. Ask them to point to the body parts on the chart they used for each action.
  - Turn their chart into a self-portrait, getting them to draw all of their body parts on their chart so it's not just an outline. If they can spell, they may label the parts as well, if not pictures are fine.
  - Point to a body part on their body check chart and ask them how it feels right now. For example, eyes: they could be itchy, sleepy, awake, dry, watery, etc.

Understanding interoception can be the key to interpreting unexplained behavior or difficulties with bodily functions. With more <u>research</u> occurring around this topic, we will certainly understand more about this eighth sense and the role it plays in individuals with ASD in the years to come.

#### For further reading:

- ☐ Interoception: The Eighth Sensory System
- ☐ <u>My Interoception Workbook A Guide for Adolescents,</u> Teens and Adults
- ☐ The Interoception Curriculum: A Step-by-Step Guide to Developing Mindful Self-Regulation



#### Maureen Bennie

Maureen has co-authored books and written over 200 articles and book reviews that have appeared in magazines, newsletters and on websites throughout North America and the UK.

Maureen Bennie created the Autism Awareness Centre in 2003 to address what she saw as a gap in support, information, resources and advocacy for those struggling with <u>autism spectrum disorders</u>. For Maureen, education and knowledge brings positive change to the lives of those affected by autism spectrum disorders.

Maureen is the mother of two young adults with autism – Marc and Julia. For 8 years, she managed an at-home Intensive Behavioral Intervention Program which involved working with speech pathologists, child development specialists, psychologists, occupational therapists, and physical therapists.

Maureen has written over 200 articles and book reviews that have appeared in magazines, newsletters, and on websites throughout North America and the UK. She is also an active presenter throughout Canada on autism topics.

Maureen presents on book resources and how to use them, topics in autism, creates book lists for various audiences, writes book reviews for publishers, assesses libraries at organizations and tells them what areas they are lacking up to date information in. She was a contributing author for the <u>SAGE Handbook of Autism and Education</u> published by SAGE, in September 2019.

<u>Maureen's weekly blog</u> post topics range from her personal experience as a parent of two children on the autism spectrum to detailed coverage of top news stories, events, and resources concerning autism spectrum disorders (ASD).

Maureen's writing provides peer-to-peer support and information for educational and advocacy purposes only. As she is not a medical professional, Maureen's writing should not be seen as providing medical advice.

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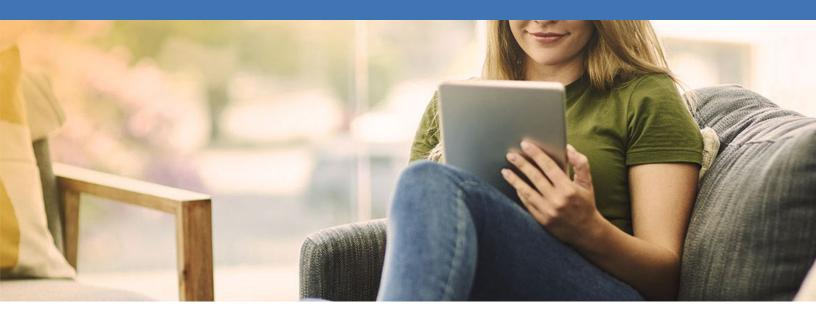
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## ANNOUNCING AUTISM AWARENESS CENTRE'S LINE OF E-BOOKS

#### A Message From Maureen

After years of receiving thousands of e-mails, comments, and questions about my blogs, I decided it was time to put together a high-level introduction to some of my most asked about topics. With over 20 years of experience raising a son and a daughter with ASD and working in the autism field, I wanted to share my knowledge and discoveries, my failures and my successes.

This series of introductory e-books are designed to help you quickly assimilate information and strategies that can be applied immediately to home, school or community settings. These e-books highlight personal stories and anecdotes from my experience, while also providing references and resources for delving deeper into a topic should you wish to do so.

These books are about empowering parents, caregivers and professionals to act in positive and effective ways while supporting individuals with ASD. It is their health, well-being, and happiness that we must keep at the forefront of our thoughts and actions.

**View All Available E-Books**