

## Facing food challenges for those with autism & sensory processing differences

Author: Senior Specialist Occupational Therapist at Options Malvern View - Ruth Cramp & the Clinical Team at Options Malvern View



### Introduction

People with Autism Spectrum Condition's (ASC) are often described as picky or selective eaters displaying very restricted repertoires of food acceptance that can be limited to as few as five foods. This can be a significant problem as a restricted diet may become associated with inadequate nutrition.

Research has indicated that factors carers felt influenced food selectivity were: texture (69%), appearance (58%), taste (45%), smell (36%), and temperature (22%)\*. Sensory seeking can contribute to overeating, cramming or making unhealthy choices.

In this issue we offer advice and suggestions about how children and young people with autism, can be supported through the challenges they face with food.

**“I didn't eat tomatoes for a year after a cherry tomato had burst in my mouth while I was eating it.”**

**(Shore 2003)**

### Sensory Issues

Research indicates that sensory issues are extremely common in people with ASC. Eating involves all of the sensory systems to some extent...

- **Taste** – The most obvious sense associated with food. The person may perceive tastes differently and/or be under or over sensitive to the food flavours they are presented with.
- **Sight** – colour, shape, arrangement of food, and the light, colour or clutter in the environment may affect mealtimes.
- **Smell** – The smell of the food during cooking, and in the eating environment.
- **Touch** – The person may avoid touching the food with their hands, or play with their food.
- **Oral defensiveness** – An avoidance of certain textures of food in the mouth, as they feel intolerable. On the other hand, a person may be under sensitive to the oral tactile input so crave more intense sensations.
- **Proprioception** – the jaw contains a high level of proprioceptors, so chewing, biting, crunching can be a good way of gaining input for sensory seekers. Those with poor proprioception may have difficulty coordinating their movements e.g. using cutlery, hand to mouth, chewing, swallowing. They may also need adapted seating that provides firm proprioceptive feedback in order to feel safe and calm.
- **Interoception** – The person may be experiencing different signals from inside their body, eg they may be oversensitive

to the feeling of drinks going down their throat, or they may not experience the feeling of their stomach being full. Physical pain and discomfort can affect how a person eats e.g. intestinal pain or toothache.

- **Vestibular** – An upright seated posture is healthiest for eating. A person with vestibular difficulties may have problems maintaining this and resort to leaning or slumping. Another person may need vestibular input to remain focussed on the eating task.
- **Auditory** – In the environment, or from the food itself as eating generates quite a lot of noise- crunching, chewing, sucking and popping.
- **Muscle Tone** (affected by proprioception and vestibular systems)- Eating can be affected by a delay in physical development or low muscle tone.

...not surprisingly it can be a difficult time for people with sensory processing differences. Unusual eating patterns may be a significant stressor for families and carers.

Additionally, for the person with ASC other aspects of mealtimes can also cause problems.

- **Social** – eating with others.
- **Routine** – regularity of meal times. The need for sameness could also explain a person's preference for processed foods.
- **Structure** – set up in room, positioning of the food on the plate, visual cues and any changes to these.
- **Independence**– food prep adaptations for prep and/or feeding.
- **Communication** – visuals for mealtimes.
- **Safety**- heat of food /pica/dysphagia. Pica refers to eating or mouthing non-edible items, such as stones, dirt and metal. The reason a person on the autism spectrum might experience pica could be sensory seeking, but other factors could be medical, cognitive, dietary, emotional or behavioural.
- **Presentation** – The way the food is presented or positioned on the plate, or the food's packaging, may dictate whether it is eaten or not.
- **Cooking** – Is the food over- or undercooked? Has the packaging changed? Is the logo a different colour? Is the box damaged? Have you bought a different brand?

**“Canned asparagus was intolerable due to its slimy texture.”**

**(Shore 2003)**

In one study, the most frequently reported eating and oral behaviour problems were reluctance to try new foods (69%), resistance to taking medicine (62%), eating too few foods (60%), mouthing objects (56%), and rituals surrounding eating (46%).

Characteristics of food such as the brand, product name, or packaging were also reported as factors (Williams et al).

## Ways you can help

Work with your Occupational Therapist to provide an individualised sensory 'diet' programme of activities to meet the person's sensory needs regularly throughout the day.

### For Undersensitivity...

- Monitor oral sensory seekers for ingestion of inedible items.
- Replace inappropriate inedible items with an appropriate alternative of a similar texture, e.g. a crunchy carrot stick, a chewy tube or popcorn.
- Under-sensitivity to taste or smell may mean the person prefers stronger flavours – offer extra seasoning and provide regular snacks, varying sweet, sour, salty and spicy.
- A move 'n' sit cushion can be a great help with posture and movement seeking.
- Compensate for undersensitivity with strong oral sensory input, e.g. ice lollies, hot drinks, crunchy, chewy foods and popping candy.

### For Oversensitivity...

- Encourage and support activities that incorporate deep touch pressure and proprioception, prior to meals – these have been reported to decrease sensory defensiveness.
- People who are very sensitive to smells and taste may prefer to eat quite bland food – do not add seasoning during cooking – offer it separately.
- Observe reactions to different textures – some people might find the feeling of hard food, or sloppy food unbearable. Modify by replacing with the preferred texture.
- Use natural food colouring to modify appearance of food.
- Introduce a new food or textures in small steps for a gradual desensitisation – either as a non-mealtime activity e.g. a tasting game, or very gradually beside their familiar meal.
- First let the person just look at the new food, then touch it, then invite them to put the food on their plate, then touch it, smell it, lick it, put it into their mouth, bite it, chew it, and swallow it.
- Encourage activities that desensitise and help to develop mouth and jaw movement and strength such as using straws for thick shakes or smoothies, playing a wind instrument or blow football.
- Provide a napkin for the person to wipe their own hands/ face.
- Ensure the person is able to feed themselves as independently as possible, using adapted cutlery and crockery if necessary – this will raise self-esteem and reduce sensory issues.
- Modify the environment such as dimming the lights or playing soft music, to reduce the person's general arousal levels and facilitate his/her ability to tolerate the sensory stressors presented by food.
- Find a quiet room for eating.

For further information about our services:

**call:** 08442 487187 | **email:** info@optionsautism.co.uk | **website:** www.optionsautism.co.uk

- Increase the person's contact with food – by preparing simple foods and increasing the range and sensory intensity of ingredients, to desensitise the person to the touch, sight and smell of food.
- A dining chair with arms and a footrest can provide security for vestibular challenges.
- Playing some favourite music, white noise, a fan or familiar poetry in the background can be relaxing.
- Check the chair they sit on, if its too hard add a cushion, also check it is a functional height elbow to table.
- Sensory sensitive eaters are often most comfortable sat with their back to the wall, and facing towards the door to reduce risk of unexpected touch or sound from behind.
- Some may eat better with visual distraction e.g. in front of a familiar TV show.
- Try a background fragrance to mask non-preferred smells.

#### For structure

- Provide storyboards or written charts to help prepare the person to anticipate different foods.
- Set up a sorting activity edible/inedible by, for example, using a talking mat.
- Presenting information visually can also help e.g. menus, schedules, timetable for snacks and mealtimes.
- It can be helpful to model the behaviour you're trying to encourage e.g. sitting together at mealtimes.
- Encourage following a rule about eating something each day from each food group.
- If a meal is not going to be at home, prepare the person in advance by telling them who will be there, what the meal is, and so on, using visual supports as necessary.
- To eat well, have meals at the same time every day, be seated in the same position at the table, or always use the same plate or cutlery.

#### For social learning

- Try not to react negatively to food being spat out.
- Encourage learning about and being comfortable around different foods, rather than getting them to eat all of the different foods presented.
- Some people eat better in the company of their family or peers, so may be more willing to try new foods if they see other people trying the same food and enjoying it.
- Others may be more relaxed, and eat more volume or variety, alone in a separate room.

#### Special Interests

Special interests can prove helpful to encourage them to eat more volume or variety, e.g. by eating from a special Dr Who plate, using counting, or theming foods.

## Professionals who can help

- A Sensory Integration trained Occupational Therapist will be able to offer advice, sensory strategies and therapy programmes to help manage sensory differences and minimize adverse effects on eating.
- Speech and Language Therapist can advise on feeding issues and swallowing problems (dysphagia).
- A Clinical Psychologist can advise on problem behaviours related to eating and drinking.
- Dietitians can offer assessment and treatment of dietary related health problems such as constipation, allergies and intolerances as well as practical advice on eating problems, weight gain and weight loss.
- Visit the GP or Dentist to rule out any medical problems, oral pain or nutritional deficiencies.

**“I had a big problem with food. I liked to eat bland and uncomplicated things... I didn't want to try anything new...I was supersensitive to the texture of food, and I had to touch everything with my fingers to see how it felt before I ate it”**

**(Baron and Baron 1992 from Attwood 1998)**

## Conclusion

As this leaflet demonstrates, eating is a complex behaviour which can be affected by differences in any of our sensory systems, as well as physical, emotional and behavioural factors.

We hope that we have provided you with some insight into these difficulties and that the suggestions provided help you to support the people you care for.

## References:

- \*Williams PG, Dalrymple N, Neal J. Eating habits of children with autism. *Pediatr Nurs*. 2000;26:259–264.
- Whiteley P, Rodgers J, Shattock P. Feeding patterns in autism. *Autism*. 2000; 4:207–211.
- Shore Stephen M .Beyond the Wall: Personal Experiences with Autism and Asperger Syndrome 2003.
- Asperger's Syndrome: A Guide for Parents and Professionals 15 Jan 1998 by Tony Attwood.

## Spread the word...

If you found this help sheet useful please feel free to share it with anyone who you feel may benefit.

Our help sheets are produced monthly and written by our clinical team. If you would like us to cover any particular subjects around autism in future editions then please let us know by emailing [info@optionsautism.co.uk](mailto:info@optionsautism.co.uk)

The complete series of help sheets can be found on our website [www.optionsautism.co.uk/resources](http://www.optionsautism.co.uk/resources)

For further information about our services:

**call:** 08442 487187 | **email:** [info@optionsautism.co.uk](mailto:info@optionsautism.co.uk) | **website:** [www.optionsautism.co.uk](http://www.optionsautism.co.uk)