

#### Please take a Bite: Addressing Food Aversion & Eating Challenges in Individuals with Autism & Aspergers

Presented by: B.E.S.T.

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# Prevalence of Eating/Feeding Issues in ASD

• Research shows that as many as 73% of children on the Autism Spectrum present with some degree of feeding/eating issue

#### What do we see?

- Extremely limited diets (only salty and crunchy or only pureed or only McD's fries)
- Grazes all day rather than sit whiling eating
- Cannot bite off food
- Wants to be fed by an adult
- Only eats finger foods

#### Why do we see these things?

- Details of presentation
- Perseveration
- Impulsivity
- Fear of novelty
- Sensory impairments
- Deficits in compliance
- Biological food intolerances
- Parental anxiety
- Reinforcement of eating refusals
- Communication impairments

#### Multiple Issues

- Upon assessment, most children with whom I have worked have had more than 4 of these issues.
- Therefore intervention cannot be focused on only one characteristic of the problem.

# Long Term Issues Associated with eating problems

- Malnourishment
- · Failure to thrive or stunted growth
- Tube dependency (not as common now that parents use things like pediasure)
- Mealtime behaviour
- Limits family's outing to restaurants or even extended family's home
- As a general rule, fewer than 10 foods is a serious health issue
- Added family stress
- Financial strain (McD's everyday or GFCF diets)

# Is Intervention Warranted?

- $\bullet\,$  Is your child at or above the  $40^{th}$  percentile for height and weight?
- Skin Colour?
- Number and variety of foods accepted?
- Meal time behaviour?
- Parent Stress?
- Gagging? Crying?Tantrums?



# Types of Feeding Disorders

- 1. Physiological or Structural
- 2. Non-physiological (Behavioural)
- 3. Combination of the two above.

# Ruling out Physiological Etiologies

#### 1. GI Diseases

- Crohn' s Disease
- IBS
- Reflux
- Eosinophilic Esophagitis
- Gut Dysbiosis

#### Celiac Disease

- Gluten causes an immune-mediated toxin reaction that causes damage to the small intestine
- In addition to physical discomfort it can lead to depression, mania, psoriasis, eczema and lymphoma
- Treatment is a gluten free diet all the time.

## Phenylketonuria (PKU)

- A birth defect in which a mutation occurs in a gene containing instructions for making the enzyme needed to break down the amino acid phenylalanine.
- Can't process protein which then attacks the brain and causes mental retardation

## Food Allergies and Food Reactions

- Allergist and Physicians can help here
- A carefully kept food diary and reactions/behaviour to foods will be invaluable to the doctor and/or allergist.
- Food intolerance can cause inflammation

#### Nutritional Assessment

- A food diary that is complete and shared with a dietician.
- Assess for deficiencies, particularly zinc, calcium, magnesium and iron.
- If you live in Canada, they will consult the Canadian food guide.

# **Special Diets**

- Special Diets should only be used to treat physical problems.
- Special Diets do not treat autism or behavioural issues.
- A better diet will, however, effect mood, energy, tolerance, cognitive stamina, and physical growth.

#### Structural or Mechanic Assessment

- This should always be done before a behavioural assessment. If not, the child could choke, have a blockage, or other serious issue as the result of an inappropriate intervention.
- Typically conducted by a speech and/or occupational therapist.
- May include swallowing, oral motor, sensory and chewing assessments.
- Refer to Handout #1 for a list of things an OT and/or SLP may include in their assessment.

## Understanding the Problem

- Take out Handout #2 "Taste, Texture, Temperature Inventory"
- With the exception of the last section, Additional Comments, I would like everyone to take ten minutes to complete the assessment tool.

# **Group Participation**

- What are some of the issues your child is facing?
- Refer to Handout #3, Food Diary
- Research shows that interventions based in an understanding of baseline data are more effective than those not based in data. We cannot arbitrarily pick a food and start introducing it.
- How to keep a food diary

#### Antecedents that Affect Feeding

- Biological state: If the child is not hungry, he will not be motivated to try new foods
- Sleep: If the child is sleep deprived, food is not a reinforcer
- Medications: Many meds reduce appetite. Talk to your doctor.
- Between meals snacks: If the child is not hungry, he will not be motivated to try new foods
- Calorie-dense foods: Carbs!

## Antecedents that Affect Feeding

- Before-meal activity: A walk, a swim, or other activity will increase the effectiveness of food as a reinforcer, even new foods.
- Daily schedule:
- Physical setting and discriminative stimuli
- choice

# Getting the Environment Ready for an Intervention: Questions that need Answering

- What foods does your child currently eat? Questionnaire and Food Diary?
- How closely does your child's diet match that of your family's diet?
- How much is your child eating?
- What is your child's meal and snack schedule?
- What and how much is your child drinking throughout the day?
- Where does your child eat?
- How does your child react to seeing new foods?
- How long is a typical meal?
- Does your child display problem behaviours at meal times?

#### Setting the stage for Success

• Set regular snack and meal times (possibly removing snack times).

- Eliminate eating between meals and snacks.
- Limit liquid intake between meals and snacks to water.
- Limit intake of milk and juice at meals and snacks.
- Decide what to present at meals.
- Establish where ALL food intake will occur.
- Establish how long meal times / snack times will be.
- Use attention contingently and sparingly.
- Take advantage of modeling.
- Use proper seating and if necessary, adaptive equipment.
- Create Eating-Related habits (e.g. same room, TV off, same bib..)

#### Shaping "table behaviour"

- The location in which you wish the child to eat needs to become an SD for eating (is associated with or a cue for eating).
- This means no eating in other locations, at least initially.
- Contriving various environmental cues that are associated with eating (placemat, special chair, certain plate, etc).
- There must be an M.O. to eat in order for the SD to prompt the occurrence of eating. (no food away from this environment)
- There must be reinforcement (satiation) in the presence of the SD in order for the SD to evoke future eating in the SD condition.

#### Taste, Texture, Temperature Inventory

- Refer back to the inventory you completed earlier.
- Group Discussion: What goals can be derived based on what your child is currently consuming?
  - Eat more food?
  - Eat a larger variety of foods?
  - Add one particular food group to his/her diet.
  - Add a larger variety of textures?
  - etc

#### What research has been done?

- Positive or Contingent Reinforcement (Alberto & Toutman, 2005)
- Escape extinction (Kitfield and Masalski, 2000)
- DRO (Gutentag & Hammer, 2000)
- Premack Principle (Grandma's rule) (Spenser & Swift, 2002)
- Texture Manipulation / Stimulus Fading (Patel et al, 2002)

# Interventions based in research and, most often used in combination

- Introducing New Foods
  - Mixing preferred and new foods (pureed veggies in KD)
  - Pairing preferred and new foods (parmasean and potatoes)
  - Reintroducing previously eaten foods (can mix with current preferred food)
  - Starting with a single bite: Grandma's Rule
  - Single bites: Discrete trials using non-food reinforcers
  - Intermittent taste sessions
  - Exit Criterion: Useful for children with severe behavioural issues (one bite criterion but may take an hour)
  - Token programs

#### Data Collection

- Only through the consistent and accurate collection of data can we monitor the child's progress. This will prevent us from maintaining an ineffective intervention or abandoning an effectively intervention prematurely.
- Refer to Handout #4, Session Data Collection

### **Escape Prevention**

- When implementing a feeding program the child is likely to engage in escape motivated behaviours.
  - Expulsion: Spiting food out
  - Re-presentation: Keep putting it on the plate even if the child doesn't eat it
  - Food holding: the chipmunk
  - Choking or swallowing phobias: watery eyes and heaving shoulders is a true gag reflex

#### Why Interventions Fail

- The intervention is discontinued too soon
- Parents are not prepared for an increase in problem behaviour
- Demands on the child are too high
- The intervention is not consistently implemented
- The reinforcers used in the intervention are not effective
- Progress was not tracked through data collection

### **Future Training Events**

Please visit <u>www.kerrysplace.org</u> and/or <u>www.BEST4Autism.ca</u> for future parent and professional learning opportunities.

Thank you!