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Feeding and Mealtime Challenges: Tips for Success

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Disclosure

- We utilize a variety of techniques, strategies and approaches in our feeding programs at LifeScape; however, much of the information being shared in this presentation is being given with express copyright permission from Dr. Kay Toomey. She is the owner and developer of the SOS Approach to Feeding program and holds the copyright for all of these materials. Erin Sundseth Ross, PhD, CCC-SLP and Bethany Kortsha, MA, OTR are also contributors.
- There are many different types of feeding therapy- systematic desensitization, flooding, force-feeding etc.
- We have had specialized training in SOS – sensory, oral, sequential feeding therapy. This method makes long-lasting impacts, and it is why we frequently utilize many pieces of it.



SOS

- Sequential – Oral – Sensory
 - Addresses all areas involved in feeding, which include oral, sensory, motor, cognitive and emotional developmental milestones as keys to feeding.
 - Is based on 4 major tenets:
 - Myths about eating interfere with understanding feeding problems
 - Systematic desensitization is the best first approach to feeding treatment
 - The normal development of feeding gives us the best blueprint for feeding treatment
 - Food hierarchies/choices play an important role in feeding treatment



Top 10 Myths About Feeding

1. Eating is the body's #1 priority
2. Eating is instinctive
3. Eating is easy
4. Eating is a 2-step process: you sit down, you eat
5. It is not ok to play with your food
6. If your child is hungry, he/she will eat
7. Children only need to eat 3x per day
8. A child who won't eat either has a behavioral or organic problem
9. Only certain foods are eaten at specified times and only certain foods are "healthy" for you
10. Mealtimes are a special occasion, and children must always use their manners



Facts

- Eating is not the body's number one priority.
 1. Breathing
 2. Postural Stability
 3. Eating



Stability

- 2nd priority – “protect the brain”
- Stability frees up the motor brain to be able to focus on eating vs “not falling on your head”
- Provides security
- Allows for better hand to mouth coordination and fine motor manipulation of food

Top 10 Myths About Feeding

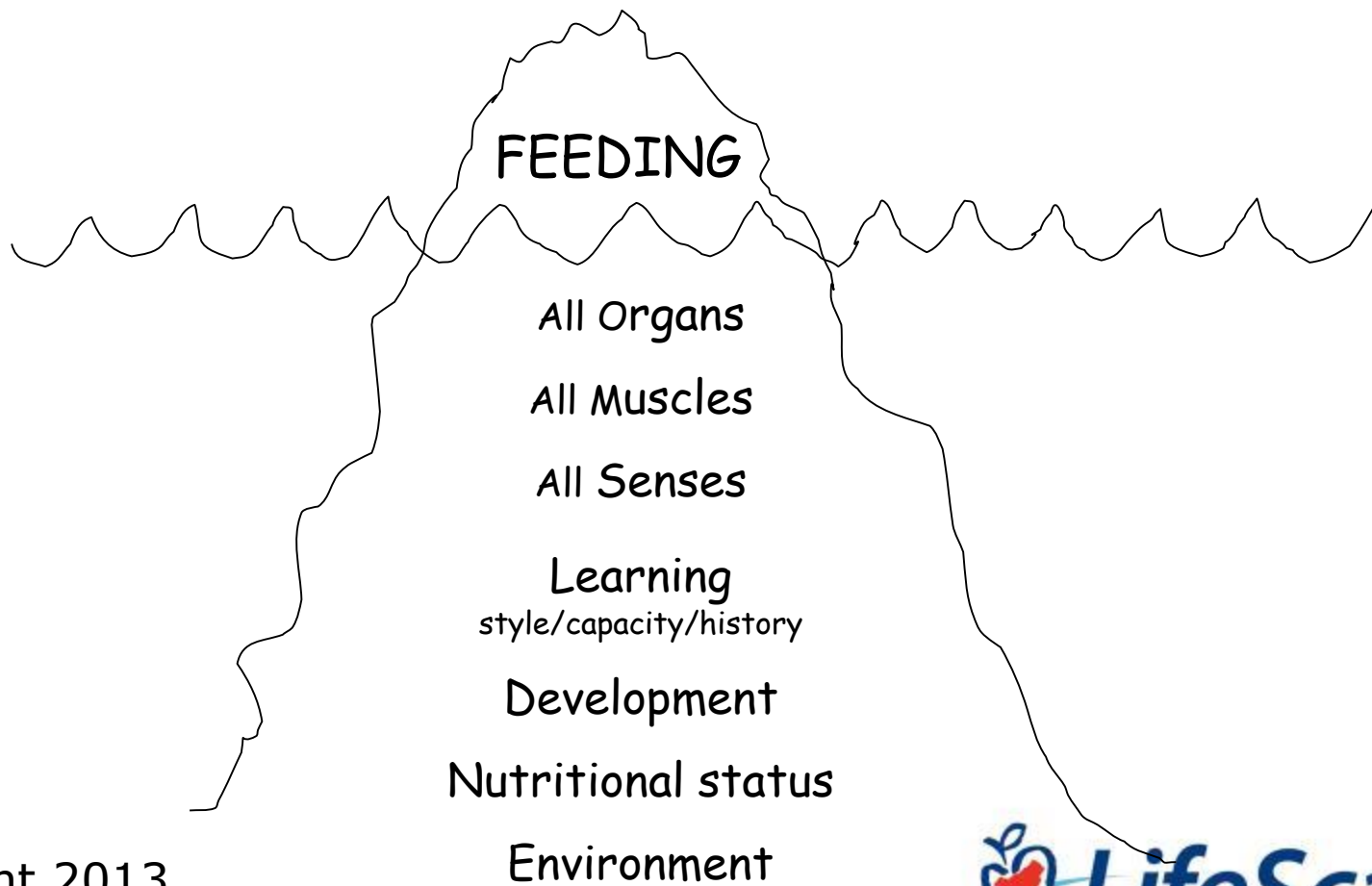
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Facts

- Eating is actually the most difficult human behavior. All organs are involved in eating in addition to all muscles and all senses. A person's development, learning style, capacity and history, nutritional status and environment are also involved in eating.
 - An individual is supposed to learn that eating is enjoyable and makes you feel good. If a part of the system isn't working correctly, a person learns that eating is hard, doesn't feel good and may not want to do it.





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Facts

- Eating has 25 steps for a typically developing child and ~32 steps for children with eating issues.
- Wearing your food is part of the normal process.
- Kids will not eat if they do not have the skills to do so.
- Meal/snack times are learning opportunities.



Systematic Desensitization

- Graduated exposure
- “Approach and withdrawal” philosophy to balance challenges with current skills and abilities.



Normal Feeding Development

Development & Oral-Motor Skills Associated with Feeding Progression: Birth to 24 Months

Age (months)	Progression of Liquid & Food	Oral-Motor Skills	Developmental Skills
0 - 4	Liquid	Suckle on Nipple	Head control acquired
4 - 6	Purees	Suckle off spoon at first Suckle → suck	Sitting balance Hands midline
6 - 9	Purees Soft chewables	Cup drinking Vertical munching Limited lateral tongue movements	Hand-to-mouth play Reach, pincer grasp Assists with spoon Finger feeding begins
9 - 12	Ground Lumpy purees	Cup drinking independent	Refines pincer grasp Finger feeding Grasps spoon w/ whole hand

Arvedson & Lefton-Greif, 1996:265

Development & Oral-Motor Skills Associated with Feeding Progression: Birth to 24 Months

Age (months)	Progression of Liquid & Food	Oral-Motor Skills	Developmental Skills
12 - 18	All textures	Lateral tongue action emerges Straw drinking	↑independence for feeding Scoops food, brings to mouth
8 - 24	More chewable food	Rotary chewing ↓ food intake by 24 mos.	
24+	Tougher solids	↑mature chewing for "tougher" solids	Total self-feeding ↑ use of fork Cup drinking, open cup and no spilling

Arvedson & Lefton-Greif, 1996:265



Children on the autism spectrum are more likely to have challenges with eating

- Estimates of feeding difficulties in children on the autism spectrum range from 46% to 89% depending on who is asked about feeding problems and how the challenges are measured. Most common mealtime behavior problems reported by parents:
 - Fear of trying new foods
 - Rigid routines around mealtimes
 - Food refusal
 - Difficulties with texture management
 - Disruptive behaviors
- Of children with autism who have difficulties with eating:
 - Food selectivity: 93%
 - Oral motor delay: 15%
 - Dysphagia: 12%

• *Taken from research shared in a presentation by Toomey & Associates Inc.*



WHY is eating more difficult for a child on the autism spectrum?

- Some have increased difficulties with gastrointestinal issues: constipation, abdominal pain, reflux
- Motor challenges: motor planning can be more difficult. This can include hypotonia (low muscle tone) and motor apraxia (difficulty coordinating motor movements).
- Sensory challenges: sensory modulation difficulties
 - Over-responders
 - Under-responders
- Language deficits: difficulties with joint attention (focusing on the same items at the same time as someone else)
- Learn differently: generalization is difficult, microscopic learning – may not recognize their foods as small changes can greatly impact what it looks like to them



General Strategies

1. Social Modeling
2. Structuring Meal/Snack Times
3. Reinforcement



1. Social Modeling: Teaching the social experience of eating

- Family meals

- Sitting down for family meals is the ideal time to work on learning about foods
- Snack times can also be structured to model and learn about foods together
- If the child is not able to sit for an entire meal, start with sitting for a snack with just 1 other person. Work up to sitting throughout the meal.



Social modeling continued ...

- Model good feeding/eating behaviors
 - Child is NOT the focus of the meal
 - Food is the focus: looking at the sensory properties of the foods
 - Imitate what the child is doing: tapping, spinning, breaking apart the foods
 - Make the food fun
 - Involve children in meal preparation as appropriate
 - Child needs to stay at the table
 - Do not punish! It should be a positive experience
 - Exaggerate the correct motor movements

During family meals/snacks, playing and modeling with food is important!

- This is the ideal time to help kids learn about the foods they are eating.
- Babies/toddlers learn about foods by watching their parents eat and try new foods – this is the same way that the children we work with can learn as well.
- The best way that children learn in addition to watching is PLAY!
- We encourage all family members to get comfortable playing with food in order to teach what foods feel like, look like, what happens when they break apart, what they smell like etc.
- It is important to understand the different food types and textures in order to know what foods might be more difficult, what foods might be easier and go together better, and how to structure meals/snacks.



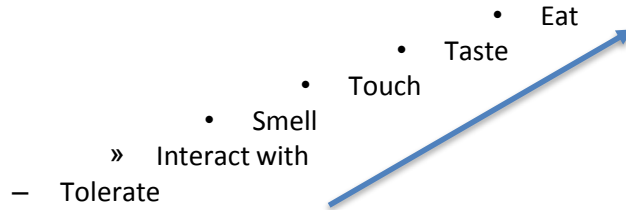
Examples of Food Types/Textures

- There are a variety of different food types – protein, fruits, vegetables, starches
- There are also a variety of food textures –
 - Hard Munchables: Hard textured food, not for consuming (carrot stick, frozen french toast stick)
 - Meltable Hard Solids: Well defined texture, but melts in the mouth (Cheeto puff, Towne cracker)
 - Soft Cubes: Soft exterior but holds shape, needs only tongue or munching to break apart (banana, avocado)
 - Soft Mechanical: Soft exterior that holds shape but needs munching/grind pressure to break apart (pasta, soft lunch meats, fish sticks)
 - Hard Mechanicals: Harder textured exterior that needs grinding/rotary chewing to break apart (steak, fruit leathers, cheerios)
 - Purees: Smooth textured foods that do not require chewing (applesauce, yogurt)



There are many steps to eating ..

- Eating begins with sensory processing.
- We look at how an individual is able to do the following with a variety of food types and textures:



- Under each of these categories may be many steps that the individual needs to go through prior to being able to put a food into his/her mouth to eat.
 - Example: If a specific food texture is difficult, a person may be ok with seeing it on the table, but may struggle with it on his/her plate. The next steps may be to interact with the food using utensils, but touching this food may be very difficult.

STEPS TO EATING: (1)Tolerates

- This is the visual sensory system
 - tolerates in same room
 - on the other side of the table
 - halfway across the table
 - near them on the table
 - looks at food directly in front of them



Tolerates cont'd

Signs your child may have difficulty with this step:

- Avoids eye contact
- May attempt to scatter foods off of the table because visually overwhelmed
- May look away from food or close eyes
- Moves chair back from the table
- Repeated eye blinking or eye watering
- Squinting
- Vomiting

STEPS TO EATING: (2) Interacts With

- Beginning to incorporate multiple sensory tasks/systems
 - Assists in preparation/set up with food
 - uses utensils to stir, pours food or drink into other container
 - uses utensil to serve self directly
 - touches with a napkin
 - touches with another food

STEPS TO EATING: (3) Smells

- Olfactory/sense of smell
 - Odor in the room
 - odor at the table
 - odor directly in front of child
 - leans down or picks up to smell



Smells cont'd

- **Signs your child may be having difficulty with smell**
 - Covers nose with hand or shirt
 - Eye watering
 - Turns head away
 - Makes a funny face
 - Coughing/gagging to smells

STEPS TO EATING: (4) Touch

- Tactile system
 - Finger tip/pad
 - whole hand
 - chest/shoulder
 - top of head
 - chin/cheek
 - nose
 - lips
 - teeth
 - tip of tongue



Touch cont'd

- **Signs your child may be having difficulty with touch**
 - Lip splays
 - Grimacing
 - Frequent hand wiping
 - Finger splaying
 - Trying to wipe your hands for you



STEPS TO EATING: (5) Taste

- Licks lips/tongue licks food
- bites off piece and spits out immediately
- bites piece and hold in mouth for “x” seconds then spits out
- bites, chews “x” times and then spits out

NOTE: Spitting is part of normal developmental process of learning to eat.

Taste cont'd

- **Signs your child may be having difficulty with taste**
 - Gagging
 - Vomiting to tastes
 - Grimacing/lip splays
 - Shudders

STEPS TO EATING: (6)Eating

- Chews and partially swallows
- chews and swallows with a drink
- chews and swallows independently

SO, WHAT CAN I DO
ABOUT IT AND WHERE
DO I START?



Structure Meal and Snack Times

1. Postural stability is important! Make sure the child is stable and secure when they are sitting so they can focus on the food.

REMEMBER: Stability frees up the motor brain and provides security.



How Do We Get Stability?

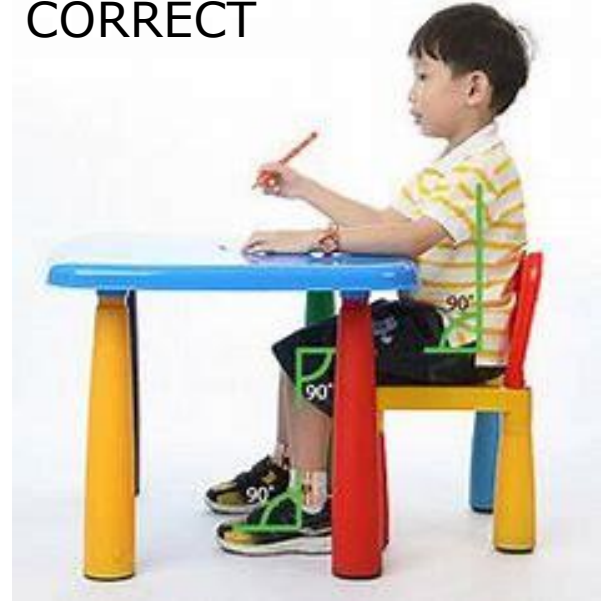
90° hips

90° knees

90° ankles

(feet should be flat and supported)

CORRECT



- May need no-skid mat under rear-end
- Add side supports for additional support



90-90-90

Incorrect



Signs you may need more support or different seating:

- slouch while sitting
- prop when sitting
- slide out from underneath tables
- prefer to stand and eat
- like to walk around and eat
- are constantly moving or adjusting position

Structure Meal and Snack Times

2. Using the same place to eat or designating a place to eat
 - Teaches sitting at the table for meal
 - Teaches them what to expect when sitting at that place
 - May use other cues to designate that a specific place is the place to eat, such as a white place mat

Structure Meal and Snack Times

3. Utilize visual supports like a visual schedule (i.e. # of foods if needed or schedule of the routine – sit, eat/play, drink, clean-up), visual timer etc.

Structure Meal and Snack Times

4. Create structure and routine and consistently follow it. The child then knows what to expect.
 - ***Beginning***: Give a warning and utilize a transition activity like washing your hands to help the child learn that a snack/meal is coming and to prepare.

Structure Meal and Snack Times

- ***Middle***: Serve family style, eat and focus on modeling. Each person should have some of the foods on his/her plate. Parents and siblings may explore and play with foods at the level the child is able to tolerate.

Structure Meal and Snack Times

- **End:** Clean up routine! Having the child help with cleaning up is a great way to provide another exposure to the foods but they then know that it will be going away and the meal is done. The child can help throw away 1 bite of each food, and he/she can even blow it away, kiss it away etc. depending on their level of comfort

Other Strategies for Meal and Snack Times

- Help child learn how to move food away from him/herself if difficult. Teach them to push it up and away and say “no”
- Need to allow them to spit foods out appropriately so they feel safe and have some control
- Keep meals/snacks to a limited amount of time – 15 to 20 minutes max
- Present foods in small amounts and only a few foods on the child’s plate at a time
- The child should have at least 1 preferred food available at every meal
- Combine highly preferred foods with a new food in tiny increments
- Try changing the foods by making simple manipulations- cut differently, cook slightly differently, use a different flavor
- Goal: to get to one protein, 1 fruit/vegetable, 1 starch presented at meals



Meals vs Snacks

- Family meals

- A great time to help expose children to a variety of different foods
- It is helpful to be aware of what foods might be more difficult and to have 1 or more “easy” foods available as well, but difficult foods can still be presented at the table
- It may be helpful to have a small plate in addition to their main plate at the table where very challenging foods can be placed (this may be needed as you work up to having the food onto his plate) – “The Learning Plate”
- All people at the table can show how to take correct bite sizes, explore new foods by smelling, touching, licking etc., chew foods adequately, take appropriate drinks, and other appropriate eating behaviors






- Snack times

- Can work on linking (sensory properties of) preferred foods and expanding repertoires



How can we link foods together to make them easier?

- Think about the sensory properties of foods:
 - Shape
 - Color
 - Size
 - Texture
 - Taste
 - Temperature

Appearance		Photoreception	Color, Size, Shape, Texture, Glossiness
Odor ↓ (Flavor)		Chemoreception	Odor/Aroma - herby, cheesy, fishy, spicy
Taste		Chemoreception	Sweet, Sour, Pungent, Bitter, Salty, Astringent
Touch		Mechanoreception & Thermoception	Texture, Mouthfeel, Temperature
Sound		Audition	Chopping, Sizzling, Popping, Crunching

- Linking foods then includes presenting foods in a specific order making sure that each food is connected to the previous food by at least one sensory property.

Baby Steps

- Make 1 change every 3 days (can be longer if needed)
- Start small and with something you feel you can be successful with.
- Start with one meal or snack and then begin to expand.
- Example: Pick a meal or snack that is at an easy time of the day, use a preferred snack like Cheeto puffs and make a small change to it. Maybe want to start with cutting them to change the shape. Then 3 days later, try white cheddar Cheetos → red snap pea crisps → licorice etc.
 - All is dependent on how well your child can tolerate small changes and what areas sensory properties of the food are the most difficult for him/her

Food Activity

- Each person has a bag of foods for an activity
- First, write down a food hierarchy that you could create using these foods – they should link by at least one property
- Then write down ways that you could play with at least 2 of the foods. Think about how you could play with the foods to help a child learn about them (i.e. learn about their texture, smell, shape etc.)
- Share these with the person sitting next to you!

Red Flags

Red flags that would indicate the need for medical attention (i.e. talking with one's doctor, therapy services):

- 🚩 Ongoing poor weight gain, weight loss
- 🚩 Ongoing choking, gagging, coughing during meals
- 🚩 Ongoing problems with vomiting
- 🚩 More than once incident of gastro-nasal reflux

Red Flags

- History of a traumatic choking incident
- History of eating + breathing problems, with ongoing respiratory issues
- Inability to transition to baby food purees by 10 months
- Inability to accept any table food solids by 12 months

Red Flags

- 🚩 Inability to transition to a cup by 16 months
- 🚩 Has not weaned off most/all baby foods by 16 months
- 🚩 Aversion/avoidance of all foods in specific texture or food group
- 🚩 Food range < 20 foods, especially if foods are being dropped

Red Flags

- 🚩 An infant who cries and/or arches at most meals
- 🚩 Family is fighting about food/feeding
- 🚩 Parent repeatedly reports the child as difficult for everyone to feed
- 🚩 Parent history of an eating disorder + child with poor weight gain

Signs that child might have other feeding challenges: dysphagia

- Dysphagia: challenges with chewing and/or swallowing
- Children with autism may also have difficulties with oral motor skills that can cause them to have trouble chewing adequately

Coughing	Choking
Wet Sounding/Gurgly Voice	Needing Multiple Swallows
Obvious Extra Effort with Swallowing	Food Remaining in Mouth after Swallow
Foods/Liquids Falling Out of Mouth	Feeling like Something is “Stuck” in Throat
Watery Eyes	Wet Breathing Quality
Grabbing Neck	Pocketing Food in Cheeks
Getting Tired When Eating	Chest Congestion After Eating
Getting Respiratory Illnesses A Lot	Weight Loss

Other Considerations/Recommendations

- Control amount of liquid intake
- Limit grazing- schedule snack times instead
- Reduce noise level and distractions
- Letting the child see what is being prepared
 - - Involve child in preparation/cleanup
- Do NOT hide medicine in food if at all possible
- Always offer new foods-even if refused before
- Reinforcement – the food and meal time should be reinforcing in itself, but you can also use verbal praise and play to make it fun!



When to seek help:

- If you are noticing any of the red flags noted as happening consistently, it is time to seek help
- Be aware of the feeding program that you are joining and look for a multi-disciplinary approach
- Ask for help from your school therapists – even if feeding is not their primary area of interest, it is important that they help set up meal times to be successful and refer on when necessary



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- Handouts
- Questions?





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