



## Handouts

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## Referral for the Mealtime Success Group

Student's Name	
Class	
Referrer's Name	

The Mealtime Success Group is meant for students who find it hard to choose a wide range of foods to eat, and who have a more limited or narrow range of foods which they find acceptable.

**THE MEALTIME SUCCESS GROUP IS NOT SUITABLE FOR STUDENTS WHO HAVE  
A PHYSICAL DIFFICULTY WITH ACHIEVING A SAFE SWALLOW  
(DYSPHAGIA/ASPIRATION) OR WHO ARE NON-ORAL FEEDERS.**

What are your concerns about this student's eating?
What does this student typically eat?
What foods does the student typically avoid (including foods they can't stand the smell of)?
What would the student's typical reaction be if they are pushed to eat something they were unsure of (e.g. spit it out, throw up, have a tantrum, run away)?
Is there any difference between eating at home and eating at school?
<b><u>DOES THIS CHILD HAVE ANY CONFIRMED OR SUSPECTED FOOD ALLERGIES:</u></b>

Have the parents given their permission for the student to join the group? Do they share your concerns?

Is there anything else that we need to know?

Referrer's signature:

Date:

We cannot accept a referral where the child has a safe swallowing (dysphagia) issue or without confirmation of any food allergies.

## **STEPS TO EATING**

### **EATING**

- chews and swallows whole bolus independently
- chews, swallows whole bolus with drink
- chews, swallows some and spits some
- bites, chews "x" times & spits out
- bites pieces, holds in mouth for "x" seconds & spits out
- bites off piece & spits out immediately
- full tongue lick
- licks lips or teeth

### **TASTE**

- tip of tongue, top of tongue
- teeth
- lips
- nose, underneath nose
- chin, cheek
- top of head
- chest, neck
- arm, shoulder
- whole hand
- fingertips, fingerpads
- one finger tip

### **TOUCH**

- leans down or picks up to smell
- odor in child's forward space
- odor at table
- odor in room

### **SMELLS**

- uses utensils or container to serve self onto own plate/space
- uses utensils or a container to stir or pour food/drink outside of own space
- uses utensils or a container to stir or pour food/drink for others
- assists in preparation/set up with food

### **INTERACTS WITH**

- looks at food when directly in child's space
- being at the table with the food just outside of child's space
- being at the table with the food ½ way across the table
- being at the table with the food on the other side of the table
- being in the same room

### **TOLERATES**

## KAY TOOMEY – SOS FEEDING

### ORAL MOTOR STEPS – Tasting and Eating

	<ul style="list-style-type: none"> <li>- food chewed to dime sized bolus, swallows all</li> <li>- food chewed to dime sized bolus with rotary chew, swallow some</li> </ul>
TRUE ROTARY CHEW	<ul style="list-style-type: none"> <li>- food moved to back molars with tongue tip movement, bolus formed and moved across mid-line at back of mouth while jaw is moving in a single direction in a smooth rotary chew</li> <li>- food moved to side at middle of mouth from center with lateral tongue movement, bolus is well formed and then moved across mid-line while jaw shifting for breakage, food is swallowed</li> </ul>
EMERGING ROTARY CHEW	<ul style="list-style-type: none"> <li>- food moved to side with lateral tongue movement and swept to back with side or tip of tongue, then held in place with tongue as jaw shifts side-to-side breaking apart the food (bi-directional), which is swallowed</li> <li>- food moved to side past eye teeth with lateral tongue movement, held in place with tongue as jaw shifts side-to-side (bi-directional) breaking apart the food, which is swallowed</li> <li>- beginning bolus formation - imprecise</li> </ul>
MUNCHING + SWALLOW	<ul style="list-style-type: none"> <li>- breaks apart with up and down motion on back teeth, most pieces swallowed</li> <li>- breaks apart with up and down motion on side teeth at middle of mouth, moves some pieces back to swallow/some spit</li> <li>- breaks apart with up and down motion at front of mouth, and spits some/swallows some</li> </ul>
MUNCHING + SPITS	<ul style="list-style-type: none"> <li>- breaks apart with up and down motion on back teeth, pieces moved forward and spits all/most</li> <li>- breaks apart with up and down motion on side teeth at middle of mouth, pieces move forward + spits out all/most pieces</li> <li>- breaks apart with up and down motion at front of mouth and spits out all pieces</li> </ul>
VOLITIONAL INDEPENDENT TONGUE MOVEMENTS	<ul style="list-style-type: none"> <li>- &gt;1 NON-uniform pieces of food moves inside mouth at front or middle of tongue, then thrust/spit out</li> <li>- &gt;1 uniform pieces of food moves inside mouth at front or middle of tongue, then thrust/spit out</li> <li>- &gt;1 uniform piece of food moves inside mouth at front or middle of tongue, then thrust/spit out</li> <li>- &gt;1 uniform pieces of food held inside mouth on front of tongue, then drooled/thrust/spit out</li> <li>- &gt;1 uniform piece of food held inside mouth on front of tongue, then drooled/thrust/spit out</li> <li>- &gt;1 uniform pieces of food held just inside mouth with only lips or teeth, then drooled/thrust/spit out</li> <li>- &gt;1 uniform piece of food held just inside mouth with only lips or teeth, then drooled/thrust/spit out</li> </ul>
HOLDS WITH HAND	<ul style="list-style-type: none"> <li>- uniform piece of food (stick/ball/circle) held with hand into middle of mouth + tongue moves laterally to taste and shift the food</li> <li>- uniform piece of food (stick/ball/circle) held with hand in front 1/3<sup>rd</sup> of mouth + tongue moves laterally to taste and/or shift the food</li> <li>- uniform piece of food (stick/ball/circle) held with hand just inside front of mouth + tongue moves laterally to taste and/or shift the food</li> <li>- uniform piece of food (stick or ball/circle) held with hand in front of mouth (lips, teeth, tongue); tongue moves forward/back to taste</li> </ul>
TASTES	<ul style="list-style-type: none"> <li>- full tongue licks food</li> <li>- tastes food with tip of tongue</li> <li>- licks lips or teeth with tip of tongue</li> </ul>

## THE RELATIONSHIP BETWEEN THE MEALTIME EXPERIENCE AND SENSORY INTEGRATION®

### THE CHILD BIRTH TO 6 MONTHS

- Reflexively turns head towards breast or bottle when mouth or cheek is touched; automatically sucks when something is placed in the mouth
- Molds body to caregiver during nursing/bottle feeding
- Spontaneously imitates simple oral movements and expressions (e.g. tongue out, rounding lips)
- Increases head control by lifting head during tummy time or when held up on caregivers' shoulder; starts to turn head separately from the body
- Brings hands together at midline, reaches out to touch/grab objects in the environment, brings hands and toys to mouth for exploration moving tongue and lips; learns about sizes, shapes, and textures
- At 4–6 months, may begin to eat small amounts of purees from a spoon or finger

### THE RELATIONSHIP TO SENSORY INTEGRATION

The touch a child receives while eating elicits early reflexes and contributes to the coordination of sucking, swallowing, and breathing.

The senses of touch, taste, smell, and sight help an infant develop eye hand coordination, trust with the caregiver, and associate positive feelings with eating.

The movement and body position senses allow children to raise themselves against the pull of gravity while preparing them to eat in an upright position.

### THE CHILD 7 TO 12 MONTHS

- Sits independently in an upright position, initially while in close proximity of the caregiver
- Begins to crawl and creep, gaining whole body strength needed for postural control and active exploration of the environment
- Moves objects from one hand to the other and develops a controlled release of toys; bangs, shakes, and throws objects; dumps toys in/out of containers; starts to explore and use utensils
- Increases engagement and play with caregiver during mealtimes with smiles and laughter; initiates games such as throwing things on the floor so the caregiver will retrieve them, and anticipates food coming to mouth
- Demonstrates awareness of texture, size, temperature, and flavor; shows increased activity with tongue and lip while taking food from spoon; uses tongue to spit out foods
- Continues to mouth toys and starts to bring food to mouth, with increasing tongue movements in the mouth and around the toys or food

### THE RELATIONSHIP TO SENSORY INTEGRATION

As the movement and body position senses develop, the child is able to maintain upright positions against the pull of gravity and change positions independently. This supports attention and allows for interactions with others during mealtimes.

The touch, taste, smell, movement and body position senses work together to provide the child insight on how to move food around the mouth. These senses contribute to the development of tongue, lip and jaw skills needed for future success eating table foods.

### THE CHILD 1 TO 2 YEARS OLD

- Sits for an interesting activity alone for a longer duration of time, increasing mealtime attention to at least 20 minutes
- Increases exploration of the environment, crawls quickly, walks or runs; plans movements to be able to eat and explore at the same time
- Becomes increasingly more independent with utensils, gaining skill with the use of a spoon and fork
- Begins to drink from a straw and a variety of cups (cups without a top, cups with spouts)
- Begins to eat a variety of table foods including increased flavors and mixed textures. At the same time, the child begins to demonstrate food preferences by communicating likes and dislikes
- Uses gestures, sounds, and some words to communicate and share interests

### THE RELATIONSHIP TO SENSORY INTEGRATION

Continued development within the movement and body position senses provide the child better control of the body, allowing active participation in the broader mealtime experience.

The refinement of touch, sight, and movement and body position help the child develop hand skills and grading of hand movements to support utensil use.

As the taste, touch, and smell sensations become enhanced, children develop food preferences based on flavors and textures they like and dislike. Keep in mind, however, that some children may need the same food presented over 25 times before trying it for the first time.

## THE RELATIONSHIP BETWEEN THE MEALTIME EXPERIENCE AND SENSORY INTEGRATION®

### THE CHILD 2-3 YEARS OLD

- Imitates motor sequences, such as making a sandwich, or scooping food from a bowl
- Uses phrases and sentences to communicate interests, wants and needs
- Responds to and looks for adult verbal praise
- Feeds self independently; begins to learn how to cut soft foods; wipes the mouth
- Demonstrates refined eating skills by chewing many table foods including most meats and most raw vegetables

### THE RELATIONSHIP TO SENSORY INTEGRATION

The senses of movement and body position are refined so that the child has better balance and the ability to coordinate head, neck and eyes during eating and feeding.

Touch, taste, smell, movement and body position senses have laid the solid foundation for complex lip, tongue, and jaw movements needed to bite with graded control, use a complex chewing pattern, and grind food to the desired consistency.

Refinement of the touch, vision, movement and body position senses have afforded the child the complex motor skills and motor-planning abilities needed to successfully tackle the mealtime experience.

### THE CHILD 3+ YEARS OLD

- Sits for extended periods of time to seamlessly participate in social gatherings around food (birthday parties, social dinners)
- Becomes increasingly more independent in assisting with food preparation and setting/clearing the table
- Is more willing to try unfamiliar foods and continues to explore a variety of tastes and textures
- Improves the ability to chew tougher meats and can now handle most table foods

### THE RELATIONSHIP TO SENSORY INTEGRATION

The child understands more complex multisensory perceptions that allow for graded adaptive responses while sitting still and while moving.

Comfort with most sights, smells, tastes, and textures of the foods with which the child commonly interacts and confident enough to explore new foods with varying smells, tastes, and textures.

This strong sensory foundation has allowed the child to develop the skills needed to successfully move all foods in and around the mouth, grade the right amount of jaw force to bite into a hard piece of candy or a soft piece of fruit, and feel when the mouth is full or if there are pieces of food on the face that need to be cleaned with a napkin.

Finally, all of the sensory experiences around mealtime are pleasurable, and allow the child the emotional security and confidence to experience a variety of mealtime activities across many cultural contexts.





## Form 3.16: Examples of EDS Development by Structure

### THE LIPS

Age	Note	Reference
6 months	Lower lip can protrude independently under a utensil to provide stability	Alexander (1987)
9 months	Upper lip actively removes food from spoon	Winstock (1994)
12–18 months	Make a seal when drinking	Winstock (1994)
By 18 months	Chew with lips closed – with intermittent mouth opening except during swallowing	Winstock (1994)
To 24 months	Food and saliva loss due to incomplete lip closure	Winstock (1994)
By 36 months	Lip seal complete in feeding	Winstock (1994)

### THE TONGUE

Age	Note	Reference
Up to 6 months	Habitual thrusting pattern	McCurtin (1997)
At 6 months	In chewing, tongue moves up and down in a munching pattern	Evans Morris & Dunn Klein (1987)
7 months	In chewing, tongue moves up and down in a munching pattern	Evans Morris & Dunn Klein (1987)
From 12 months	Transfer centre to side initially with a pause in transfer	Winstock (1994)
At 12 months	Tongue may protrude slightly under cup to provide stability	
12–18 months	Rotary tongue movement	Winstock (1994)
24 months	Can transfer side to side without pausing	Evans Morris & Dunn Klein (1987)

## Form 3.17: Normal EDS Development: Self-Feeding

Weeks of age	Skill
8–12 weeks	Makes small movements towards objects
12 weeks	Holds rattle placed in hand
16 weeks	Brings hands together in play
20 weeks	Approach movements begin. Mouths everything
24–28 weeks	Grasps. Will close palm around food and take to face. Bangs spoon. Shoulder control improving which helps in bringing spoon to mouth
Months of age	Skill
7–8 months	Holds bottle without help. Reaches towards dish. Picks up bits of food with thumb and first finger and takes to mouth
9–12 months	Offers but cannot release. Self-feeds defined lumps using thumb and forefinger. Drinks from cup held for him/her. Holds spoon but poor control
15 months	Finger-feeds well. Holds spoon with pronated grasp. Filling of spoon is poor. Spoon often overturns before reaching mouth
18 months	Fills spoon. Turns spoon in mouth, frequently spilling. Lifts cup to mouth bilaterally. May tip cup too much causing spilling. Beginning to release cup
24 months	Releases cup without spilling. Can hold small cup in one hand. Independent with spoon – moderate spillage. Spoon in mouth without turning
36 months	Little assistance needed. Beginning to use adult (supinated) grasp on utensils. Pours from jug. Uses fork
36–48 months	Spreads butter with knife
48–60 months	Cuts with knife

*Based on Gessell (1940)*

## Form 3.18: Normal EDS Development Examples

<b>Textures</b>	0–6 months:	Liquids – breast/formula
	4–6 months:	Purées – bland, smooth, gluten-free (till 6 months) Winstock (1994) states 3–4 months
	8–12 months:	Mash, finger foods
	12–15 months:	Finely chopped
	15–24 months:	Table food (Evans Morris & Dunn Klein, 1987)
<b>Food preferences</b>	Birth:	Preference for sweet tastes, ie breast milk
	3 months:	Preference for other tastes
	6 months:	Preference for other tastes based on exposure to that taste
	1 year:	Preference for texture based on exposure to that food. Likes to imitate adults
	18 months:	Relative neophobia. Likes to imitate other children
	4 years:	Food categorisation complete. Has learned what can and cannot be eaten (Winstock, 1994)
<b>Utensils</b>	0–3 months:	Nipple/teat
	3–6 months:	Exposure to spoon feeding
	4–6 months/	
	6–9 months:	Cups/beakers introduced
	9–12 months:	Towards more adult spoon – more rigid, flatter bowl
	12–18 months:	Two-handed beaker
	18–36 months:	Open cup
	24–30 months:	Fork
	36–48 months:	Knife to spread butter
	48–60 months:	Knife to cut (Winstock, 1994)

**Form 3.18: *continued***

<b>Food play</b>	3–6 months:	Exploration through mouthing
	6–9 months:	Playing with food. Enjoys feeling food. Enjoys babbling with a mouthful of food
	9–12 months:	Enjoys playing with food – prodding, spreading, squeezing etc
	12–18 months:	Pretend play. Feeds self, others, toys
	24–60 months:	Plays with tea set, pots and pans. Helping adults in preparation Enjoys more elaborate pretend play such as shopping, cooking Enjoys helping to mix and stir (Winstock, 1994)
<b>Behaviour &amp; communication</b>	9–12 months:	Shakes head for ‘no’
	From 2–3 years:	Food refusal and fussiness are quite common Initial reaction to new foods is spitting out
	At 24–36 months:	Uses speech to express likes and dislikes

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