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## continued

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## continueD.

# Technical issues with the Recording?

- Clear browser cache using these instructions
- Switch to another browser
- Use a hardwired Internet connection
- Restart your computer/device

## Still having issues?

- Call 866-782-9924 (M-F, 8 AM-8 PM ET)
- Email <u>customerservice@OccupationalTherapy.com</u>





## **Disclosures**

- Karen and Stephanie are co-directors and founders of the Chicago Feeding Group, a 501(c)3 organization
- Karen Dilfer maintains a private practice in Illinois.
- Stephanie Cohen maintains a private practice, Cohen Speech and Feeding Solutions, PLLC, in Illinois.



# Learning Outcomes

After this course, participants will be able to:

- Describe how a child may develop an aversion to certain foods and explain how these aversions may be avoided during developmental experiences.
- Describe at least three common signs and symptoms which may indicate a child has a food allergy.
- Describe the purpose of a feeding tube and at least two reasons why a child may need a feeding tube.

## continued



## MEALTIMES SHOULD FEEL GOOD

- Parents are responsive
- Child has **success** at every level
- Children and parents feel celebrated
- Parents know what to do when therapist isn't there



Pediatric Feeding Disorder (PFD)

"Impaired oral intake that is not age-appropriate, and is associated with medical, nutritional, feeding skill, and/or psychosocial dysfunction."

Goday et al., 2019

## continued

Pediatric Feeding Disorder (PFD)

- Prevalence between 33% to 80% in children who have developmental disorders, incidence increasing (Lefton-Greif, 2008)
- For these infants and children, every bite of food can be painful, scary, or impossible, potentially impeding nutrition, development, growth, and overall well-being.

(www.feedingmatters.org)



Prematurity  Pediatric Feeding Disorder (PFD) may Occur with:  Prematurity  Cardiopulmonary disease  Chromosomal abnormalities (e.g., Down syndrome)  Syndromes  Disease/Disorders  Neuromotor and Neuromuscular Disorders  Oral and/or pharyngeal dysphagia  Food allergies and/or intolerances	continued	
	Feeding Disorder (PFD) may occur	Cardiopulmonary disease  Chromosomal abnormalities (e.g., Down syndrome)  Syndromes  Disease/Disorders  Neuromotor and Neuromuscular Disorders  Oral and/or pharyngeal dysphagia

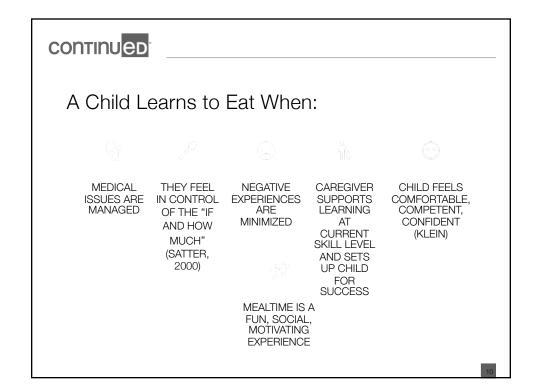
### continued Gastrointestinal disorders (e.g., EoE, **Pediatric** constipation) Structural abnormalities (e.g., cleft palate, Feeding laryngomalacia, TEF) Developmental experiences or lack thereof Disorder (PFD) may Environmental challenges be Sensory processing differences associated Mental health challenges with: Poor attachment/disruption in feeding relationships Trauma





# "Eating is built on a foundation of positive developmentally appropriate experiences."

-Marsha Dunn Klein, OTR/L, MEd. FAOTA





## A Child Learns Not to Eat in Response to:

- Physical discomfort
- Emotional discomfort
- Lack of control
- Feeling unsafe
- Not feeling respected
- Lack of pleasure and connection to others

First Steps

Help a child feel good & resolve medical issues

Recognize what's hard

Responsive feeding practices



## continued<sup>®</sup>

# Meeting Children Where They Are

- What is comfortable NOW?
- What is working?
- How do we take what's working and adapt it to promote change?

continued.

Feeling Good Physically



continued<sup>®</sup>

# Medical Management

- We need to help kids feel good physiologically and medically
- Determine appropriate referrals
- Parent education
- Support parents in the process

continued

Specific Medical Conditions



# SSB incoordination/immaturity

Signs and symptoms in preterm infants may include:

- Change in state of alertness
- Change in postural control, tone or movement patterns
- Change in cardio-respiratory behavior
- Lack of synchrony (uncoupling) between swallowing and breathing

(Shaker, 2013)

continued

# Silent Aspiration in Children

- 1,286 swallow studies of children <18 years old
  - 31% of children who aspirated did so silently
  - <6 months, 95% were silent aspirators</p>

(Velayutham et al., 2018)

 Pediatric patients with laryngomalacia who present with recurrent respiratory issues and/or feeding difficulty: aspiration was identified in 60 patients (42.3%), and silent aspiration was documented in 59 (98.3%) of these 60 patients. (Irace, et al. 2019)



# Food Allergies and Intolerances

- Approx. 8% of children affected, 2.4% have multiple allergies (Gupta et al., 2018)
- The most prevalent allergens were peanut (2.2%), milk (1.9%), shellfish (1.3%), and tree nut (1.2%) (Gupta et al., 2018)
- Immune Mediated
  - IgE: anaphylaxis, oral allergy syndrome
  - Non-IgE mediated: FPIES
  - Mixed IgE and Non-IgE: EoE
- Non-immune mediated: primarily intolerances

Q4

continued

# Food Allergies and Intolerances

- Signs/symptoms may include:
  - Feeding aversion
  - Slow eating
  - Vomiting
  - Mealtime struggles (Wu et al., 2012)
  - Reflux
  - Diarrhea or constipation (Dehghani, Amahdpour, et al., 2012)
  - Slow growth
  - Atopic dermatitis- seen in 29.2% of children 0-2 with FA- (Samady, et al. 2019)



# Food Allergies and Intolerances

- Referral to allergist and GI may be appropriate
- Testing dependent on age and symptomology

continued

## **Tethered Oral Tissues**

- Prevalence of ankyloglossia ranging from 0.1 to 10.7% (Miranda, Cardoso, & Gomes, 2016)
- Literature inconclusive re: assessment and treatment protocols
- Lingual, labial, buccal frena should be assessed as part of oral mech exam
- Assessment should be made by dentist and physician, with therapist input (<a href="https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589943975&section=Assessment">https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589943975&section=Assessment</a>)

continued

## **Tethered Oral Tissues**

- Assessment of FUNCTION is critical
- May impact mobility of tongue, lips, cheeks
- May lead to difficulty with sucking during breastfeeding, chewing (Miranda, Cardoso, & Gomes, 2016)
- Child learns he is not able to manage certain foods adequately
- Research is lacking on nonsurgical interventions, as well as on outcomes other than breastfeeding (Francis, D.O., Chinnadurai, S. et al., 2015)
- Referral to an experienced ENT or dentist to further assess

## continued

# Motility Issues

#### The Esophagus

 Gastroesophageal Reflux Disease (GERD) Dysphagia Achalasia Functional Chest Pain

#### The Stomach

 Delayed Gastric Emptying (Gastroparesis) Rapid Gastric Emptying (Dumping Syndrome) Functional Dyspepsia Cyclic Vomiting Syndrome (CVS)

#### The Small Intestine

 Intestinal Dysmotility, Intestinal Pseudo-Obstruction Small Bowel Bacterial Overgrowth

#### The Large Intestine (Colon)

Constipation
 Diarrhea
 Hirschsprung's Disease
 Irritable Bowel Syndrome
 (IBS)

#### The Anorectum and Pelvic Floor

Fecal Incontinence
 Hirschsprung's Disease
 Outlet Obstruction Type
 Constipation (Pelvic Floor
 Dyssynergia)

(https://www.aboutgimotility.org/learn-about-gi-motility.html)

Q5





# Motility Issues

- Can be hard to diagnose
- Symptoms may include: vomiting, constipation, gassiness, abdominal pain, nausea, limited or inconsistent volume of intake, reflux
- Can occur in isolation or with other GI, neurological, and/or neuromotor conditions (e.g., EoE, cerebral palsy)
- Refer to GI
- Manometry or gastric emptying study may be used

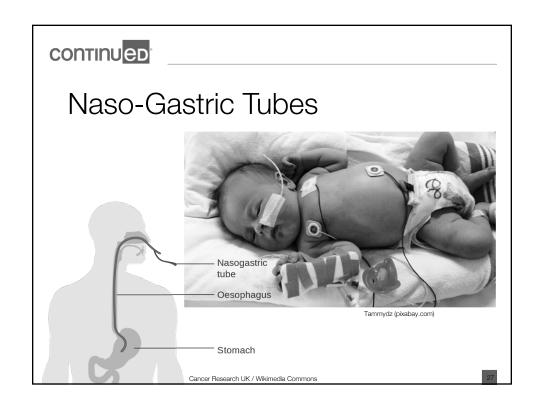
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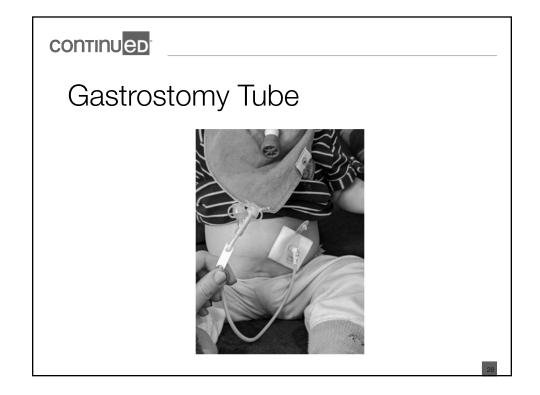
# Feeding Tubes

Why might a child need a feeding tube?

- Nutrition during & after medical procedure
- Difficulty growing
- Structural abnormality (e.g. esophageal atresia)
- Inflammatory/metabolic/gastrointestinal dysfunction (food allergy, delayed gastric emptying, etc.) (Nowak-Cooperman, 2013)
- Aspiration

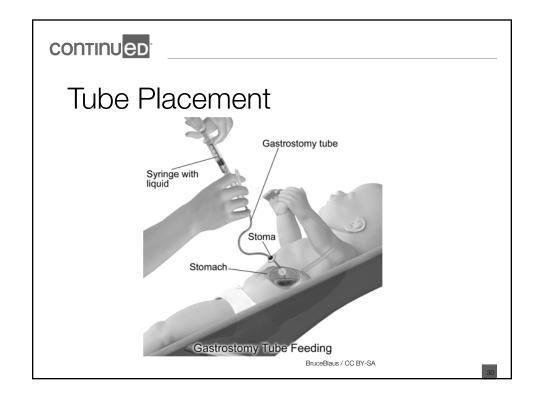




















# Feeding Tubes: The Bridge to Oral Eating

- Schedule → Mimic typical feeding schedule
  - Hunger/fullness
- Type of food
  - Breastmilk
  - Formula
  - Blended food
  - Water

## continued

# Procedure → Mealtime

- Recognize trauma for parents and kids
- De-medicalize feedings
  - Language
  - Schedule



## continued<sup>®</sup>

# Benefits of Mealtime Participation

- Mealtime jobs
- Kids learn mealtime routines
- Build sustained attention
- Parents learn routine of including child → feeding child by mouth
- Sensory experiences



(Backman et al., 2019)

continued

# Transitioning off of a tube

Medically stable

Growing well

Feels well

Volume tolerance

Attention span

Mealtime experiences

Family is ready





Feeling Good Emotionally

- Sensory regulation
- Emotional regulation
  - Anxiety

## continueD

## Feeling Good: Sensory Regulation

- Eating is Sensory! (Klein, 2015)
- Synthesizing sensory input at mealtime:
  - Smell
  - Taste
  - Vision
  - Texture
- Other important sensory systems:
  - Interoception: internal sensations
  - Proprioception
  - Vestibular



Q6





# Feeling Good Emotionally

- Stress responses, fight/flight response
- Anxiety and appetite
- Ability to participate in mealtimes
- Parents' emotional state
- Maternal mental health and impact on responsiveness



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## continued

# Feeling Good Emotionally

- Trusting relationship with caregiver
  - Child communicates clear cues
  - Parent understands and is responsive
  - Continuous reciprocity
  - Predictability matters
  - Co-regulation supports child's emotional regulation



Photo by <u>Daria Shevtsova</u> from <u>Pexels</u>



# Trust is Essential

- Child can trust:
  - Caregivers
  - Food
  - Own body



Photo by Nandhu Kumar from Pexe

# continued

# References

See attached handout



# Questions

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