

Considerations for a Student with Swallowing and/or Feeding Concerns

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Overview:

Children with complex health conditions, especially those with neurological impairment (i.e., cerebral palsy) or respiratory disease, are at increased risk for swallowing dysfunction (Lefton-Greif & Arvedson, 2008). Some of these children may experience dysphagia or have a diagnosis of [Pediatric Feeding Disorder](#) (PFD). PFD is “impaired oral intake that is not age-appropriate, and is associated with medical, nutritional, feeding skill, and/or psychosocial dysfunction” (Goday, et al., 2019, p. 124). [Dysphagia](#), the medical term for difficulty swallowing liquids, foods, saliva or the complete inability to swallow, can be a symptom associated with PFD (National Institute on Deafness and Other Communication Disorders, 2017).

Students with a swallowing and feeding disorder or Pediatric Feeding Disorder (PFD) can exhibit the following symptoms:

- Choking
 - Aspiration
 - Oral-motor and sensory impairments
 - Maladaptive behaviors during eating activities
 - Refusal to eat
 - Restricted variety of acceptable food and liquid (American Speech-Language-Hearing Association (ASHA, 2007).
- Anatomic, neurologic, and/or physiologic functions may be affected and could include:
 - [Motor planning](#)
 - Postural and oral-pharyngeal motor abilities
 - Sensory processing
 - Respiration, and
 - Digestion (ASHA, 2007).
- Students with airway deficits and neurologic disorders (i.e., cerebral palsy) are more likely to have swallowing problems (ASHA, 2007).

A student who exhibits any of the following signs and symptoms should be referred to the district’s speech and language pathologist (SLP):

- Coughing and throat clearing when eating or drinking or from accumulating saliva
- Drooling

- Effortful swallowing
- Eyes watering/tearing during mealtime
- Food remaining in the mouth (pocketing) after swallowing
- Gagging or vomiting associated with eating and drinking
- Hypersensitive gag reflex
- Inability to drink from a cup
- Maintains open mouth posture
- Mealtime takes longer than 30 minutes
- Multiple swallows per bite of food or sip of liquid
- Nasal regurgitation
- Poor oral motor functioning
- Poor upper body control
- Refusal to eat
- Slurred speech
- Spillage of food and liquid from the mouth
- Stressful mealtimes
- Swallowing solid food without chewing, and
- Wet breath sounds and/or gurgle-like voice quality associated with swallowing (ASHA, 2007, pp 6-7, 23).

Additionally, it is recommended that the student be evaluated if they have any of the following concerns:

- Weight loss or lack of weight gain for expected age
- Frequent respiratory illness, and
- Constipation, diarrhea, or other gastrointestinal problems (ASHA, 2007).

In addition to making a referral to the school district's SLP, the parents/guardians should be made aware of the concerns. If the school district does not have a SLP or access to a consulting SLP, the school district should encourage the parents/guardians to see their child's health care provider.

Students who are exhibiting signs and symptoms of PFD may require a [Videofluoroscopy Swallow Study](#) (VSS) also known as a Modified Barium Swallow Study (MBSS). This test is performed by a speech-language pathologist and a radiologist. The test, which takes a video x-ray while the student is eating and drinking, evaluates the safety and efficacy of swallowing and can detect aspiration and other problems with swallowing (Cincinnati Children's, 2023). It is recommended that a student who has any of the following symptoms be referred for a VSS/MBSS:

- Signs and symptoms of aspiration (gurgly voice, coughing, and/or multiple swallows)
- Frequent/recurrent history of pneumonia/chest congestion/wheezing
- Upper airway congestion after meals
- At risk for undernutrition and/or dehydration
- Previous history of aspiration (Homer, 2018).

It is important to note that if the school district **requests** the parents/guardians to have a VSS/MBSS completed on a student who is receiving special education services, then the school district would be required to pay for the test (U.S. Department of Education, 2011).

If it is determined that the student has a swallowing/feeding disorder, they should be evaluated to determine if they qualify for an Individualized Education Program (IEP) or a Section 504 Plan. Although swallowing and feeding disorders or PFD is not considered a special education classification, many students with PFD qualify under Developmentally Delayed or Other Health Impaired (Homer, 2020).

Management and Treatment:

One of the important pieces of the student's treatment plan will be a Safe Swallowing and Feeding Plan. A team approach is required for the development of the plan. The following is a list of recommended team members:

- Student
- Parents/Guardians
- Speech and Language Pathologist
 - School based and community, if applicable
- Physical therapist (PT)
- Occupational therapist (OT)
- School Nurse
- School Psychologist
- Social Worker
- Teacher(s)
- School Aides
- Food Services Staff
- Dietician
- School administration
- Student's health care provider(s)

Under the leadership of the SLP, the team should develop a Safe Swallowing and Feeding Plan to "ensure that the student receives adequate nutrition efficiently and in the safest manner possible to minimize aspiration risk" (ASHA, 2007, p. 16). The Safe Swallowing and Feeding Plan should include the following:

1. Contact information for dysphagia case manager
2. History of the student's health concern
3. Feeding recommendations
4. Positioning
5. Equipment
6. How food is provided (gastrostomy tube only, oral food only, gastrostomy tube and oral food)
7. Amount of food provided orally
8. Diet/Food prep

9. Food consistency (pureed, ground, chopped, mashed, bite sized)
10. Liquid consistency (no liquids, thick liquids, thickened liquids)
11. Thickened liquid consistency (nectar, honey, pudding)
12. Feeding plan techniques and precautions
13. Amount of food per bite
14. Food placement in the mouth
15. How long the student should remain upright after feeding
16. How often the student should be offered liquid (i.e., after how many bites of food) and
17. Information regarding medication administration requirements, if applicable (ASHA, 2007, p. 28).

Homer (2020) recommends that at least three classroom staff members (including the teacher) should be trained on the plan in the event the main feeders are absent. If all three trained feeders are absent the school administration should have in place a list of qualified feeders such as the SLP or OT who would be assigned to feed the student.

In addition to developing Safe Swallowing and Feeding Plans the American Speech-Language-Hearing Association (n.d.b.) recommends that a school-based swallowing and feeding service include:

1. Implementing a safe swallowing and feeding plan during mealtimes at school.
2. Providing education and training to students, families, and school staff on safe swallow strategies.
3. Training classroom or cafeteria staff to modify student's food and liquids to meet the swallowing and feeding plan recommendations.
4. Maintaining safe mealtimes at school with ongoing monitoring and consultation with classroom staff.
5. Training classroom staff to (a) recognize signs and symptoms of aspiration as well as changes in a student's feeding and swallowing skills and (b) immediately report those changes to the team.
6. Training students to self-advocate for appropriate food and liquid consistencies.
7. Revising a swallowing and feeding plan when changes are warranted.
8. Collaborating with parents, physicians, related service providers, and food services staff.
9. Intervening therapeutically, when indicated, to improve functional eating skills and to ensure a safe swallow.

Homer (2020) recommends that school districts develop policies and procedures related to safe feeding plans for students which include the following components:

- Referral Process
- Parent interview and input
- Interdisciplinary observation of meals at school (Clinical Evaluation)
- Swallowing and Feeding Plan and Individualized Health Care Plan (IHCP)
- Cafeteria Procedure
- Training of classroom staff on the swallowing and feeding plan and recommended food modifications

- IEP meeting
- Referral process for Modified Barium Swallow Study (MBSS) also known as a [Video Fluoroscopic Swallowing Study \(VSS\)](#) or medical consultation, when indicated
- Process for revision of plan, when indicated
- Ongoing monitoring for maintaining safety, and
- Therapeutic intervention for improving functional eating skills, when indicated

Students with swallowing and feeding disorders may require meal modifications. School food services programs are required to modify meals for students whose disability prevents them from accessing the typical cafeteria meal. If schools will be making meal modifications, if possible, the school district should consult with a dietician (ASHA, 2007).

If the school will be providing a modified meal that does not meet the program meal pattern requirements, the school must obtain a written medical statement from a state licensed health care professional in order to receive reimbursement for meal modifications ([7 CFR 210.10](#)).

The written medical statement should include the following information:

- Information about the child's physical or mental impairment that is sufficient to allow the school food authorities to understand how it restricts the child's diet,
- An explanation of what must be done to accommodate the child's disability, and
- The food or foods to be omitted and recommended alternatives, in the case of a modified meal (United States Department of Agriculture Food and Nutrition Service, 2017).

If the substitution of a liquid nutritive formula will be used to accommodate a disability, this information must be included in the statement. A separate medical statement may not be required if the student's IEP or 504 Plan includes the information required in the medical statement, or if the school district obtains written medical verification of the impairment during the IEP/504 Plan process (United States Department of Agriculture Food and Nutrition Service, 2017).

The Role of the School Nurse:

The school nurse should be a part of the team for a student with Pediatric Feeding Disorders.

As part of the team the school nurse should consider:

- Developing an Individualized Health Care Plan (IHCP)
- Developing an Emergency Action Plan (EAP)
- Assisting with the development of an IEP or 504 Plan
- Ensuring the proper health care provider's orders for:
 - Medication administration
 - Nursing procedures (i.e., [gastrostomy tube feedings](#), [tracheostomy](#) care)
- Ensuring proper administration of medications
- Ensuring proper administration of gastrostomy tube feedings, if applicable
- Monitor the student for signs and symptoms:
 - Undernutrition
 - Respiratory concerns including distress or infection

- Gastrointestinal concerns including vomiting, constipation, and/or diarrhea
- Provide case management for other health concerns such as tracheostomy, gastrostomy tube, etc. including but not limited to:
 - Communicating with parents/guardians
 - Communicating with student's health care provider(s)
 - Training appropriate school personnel, and
 - Safe delegation of nursing procedures and medication administration

Important Points to Remember:

- A speech language pathologist (SLP) is a critical member of the team for a student with PFD (ASHA, n.d.a.) since swallowing and feeding assessment and treatment are part of the SLP scope of practice (ASHA, 2016). "The school SLP should lead the team to evaluate PFD and support the child, family, and school team in safety and maximize the child's ability to learn and participate in the school day" (D'Angelo, 2023, p. 11). If the school district does not have a SLP or the SLP does not have dysphagia training they should consider consulting with a community-based SLP for evaluation and treatment (ASHA, 2007).
- A student who exhibits any signs or symptoms of swallowing or feeding disorders should be evaluated by a health care provider.
- Collaboration between the student, student's family, school team, and health care provider(s) is crucial.
- The school nurse should assist in the development of Emergency Action Plans.
- If there are concerns regarding a student's ability to safely swallow and eat at school the school team should communicate their concerns with the parents/guardians and health care provider(s). The school team's decision-making should be "based on evidence related to the child's overall status, with safety as the uppermost consideration" (Feltron-Greif & Arvedson, 2008, p. 244).
- Language-Hearing Association: Pediatric Feeding and Swallowing
https://www.asha.org/practice-portal/clinical-topics/pediatric-feeding-and-swallowing/#collapse_4
- American Speech-Language-Hearing Association: Pediatric Dysphagia Resources
<https://www.asha.org/siteassets/practice-portal/pediatric-feeding-and-swallowing/pediatric-dysphagia-resources.pdf>
- Children's Mercy Kansas City Interdisciplinary Feeding and Swallowing Program
<https://www.childrensmercy.org/departments-and-clinics/gastroenterology/feeding-clinic/>
- Feeding Matters Infant and Child Feeding Questionnaire©
<https://questionnaire.feedingmatters.org/>
- Management of Swallowing and Feeding Disorders in Schools 1st Edition
<https://www.pluralpublishing.com/publications/management-of-swallowing-and-feeding-disorders-in-schools>
- Missouri Guidelines for School-Based Speech-Language Pathologists (information on Dysphagia in Schools pp. 58-59). <https://showmemsha.org/pdfs/MSHA-Handbook-rev-2020.pdf>
- Missouri Speech-Language-Hearing Association <https://showmemsha.org/>

- National Foundation of Swallowing Disorders <https://swallowingdisorderfoundation.com/>
- System-approved Swallowing and Feeding Procedure <https://dysphagiacafe.com/wp-content/uploads/2017/06/Homer-Chart.pdf>
- USDA Accommodating Children with Special Dietary Needs in the School Nutrition Program. Guidance for School Food Service Staff. https://fns-prod.azureedge.us/sites/default/files/special_dietary_needs.pdf
- Virginia Department of Education: Dysphagia in the Schools <https://www.doe.virginia.gov/programs-services/special-education/technical-assistance-professional-development/speech-language-pathologists-professional-development>

Resources:

- American Speech-Language-Hearing Association: Pediatric Feeding and Swallowing https://www.asha.org/practice-portal/clinical-topics/pediatric-feeding-and-swallowing/#collapse_4
- American Speech-Language-Hearing Association: Pediatric Dysphagia Resources <https://www.asha.org/siteassets/practice-portal/pediatric-feeding-and-swallowing/pediatric-dysphagia-resources.pdf>
- Children's Mercy Kansas City Interdisciplinary Feeding and Swallowing Program <https://www.childrensmc.org/departments-and-clinics/gastroenterology/feeding-clinic/>
- Feeding Matters Infant and Child Feeding Questionnaire© <https://questionnaire.feedingmatters.org/>
- Management of Swallowing and Feeding Disorders in Schools 1st Edition <https://www.pluralpublishing.com/publications/management-of-swallowing-and-feeding-disorders-in-schools>
- Missouri Guidelines for School-Based Speech-Language Pathologists (information on Dysphagia in Schools pp. 58-59). <https://showmemsha.org/pdfs/MSHA-Handbook-rev-2020.pdf>
- Missouri Speech-Language-Hearing Association <https://showmemsha.org/>
- National Foundation of Swallowing Disorders <https://swallowingdisorderfoundation.com/>
- System-approved Swallowing and Feeding Procedure <https://dysphagiacafe.com/wp-content/uploads/2017/06/Homer-Chart.pdf>
- USDA Accommodating Children with Special Dietary Needs in the School Nutrition Program. Guidance for School Food Service Staff. https://fns-prod.azureedge.us/sites/default/files/special_dietary_needs.pdf
- Virginia Department of Education: Dysphagia in the Schools <https://www.doe.virginia.gov/programs-services/special-education/technical-assistance-professional-development/speech-language-pathologists-professional-development>

References:

- American Speech-Language-Hearing Association (n.d.a.). Pediatric feeding and swallowing. (Practice Portal). Available at: www.asha.org/practice-portal/clinical-topics/pediatric-dysphagia/.
- American Speech-Language-Hearing Association. (n.d.b.). *Swallowing and feeding services in schools via telepractice during COVID-19*. Available at: <https://www.asha.org/slp/schools/swallowing-and-feeding-services-in-schools-via-telepractice-during-covid-19/>
- American Speech-Language-Hearing Association. (2007). *Guidelines for speech-language pathologists providing swallowing and feeding services in schools* [Guidelines]. Available at: www.asha.org/policy
- American Speech-Language-Hearing Association. (2016). *Scope of practice in speech-language pathology*. <https://www.asha.org/policy/sp2016-00343/>
- Cincinnati Children's. (2023, November). *Feeding and swallowing problems (dysphagia)*. Available at: <https://www.cincinnatichildrens.org/health/f/dysphagia>
- D'Angelo E. C. (2023). Clinical feeding and swallowing evaluation for the school-based speech-language pathologist. *Language, Speech, and Hearing Services in Schools*, 1–14. Advance online publication. https://doi.org/10.1044/2023_LSHSS-23-00019
- Goday, P. S., Huh, S. Y., Silverman, A., Lukens, C. T., Dodrill, P., Cohen, S. S., Delaney, A. L., Feuling, M. B., Noel, R. J., Gisell, E., Kenzer, A., Kessler, D. B., Kraus de Camargo, O., Browne, J., & Phalen, J. A. (2019). Pediatric feeding disorder: Consensus definition and conceptual framework. *Journal of Pediatric Gastroenterology and Nutrition*, 68(1), 124–129. <https://doi.org/10.1097/MPG.0000000000002188>
- Homer, E. (2018). Students eating safely at school: *Evaluating swallowing and feeding skills in children with Down's Syndrome*. Available at: <https://dysphagiacafe.com/2018/08/18/students-eating-safely-school-evaluating-swallowing-feeding-skills-children-downs-syndrome/>
- Homer, E.M. (2020). *Swallowing (dysphagia) and feeding services in the school setting: Things parents should know*. Available at: https://www.feedingmatters.org/wp-content/uploads/2020/05/Feeding-Matters-Schools.jp_-2.pdf
- Lefton-Greif, M. A., & Arvedson, J. C. (2008). Schoolchildren with dysphagia associated with medically complex conditions. *Language, Speech, and Hearing Services in Schools*, 39(2), 237–248. [https://doi.org/10.1044/0161-1461\(2008\)023](https://doi.org/10.1044/0161-1461(2008)023)
- National Institute on Deafness and Other Communication Disorders (2017). *Dysphagia*. Available at: <https://www.nidcd.nih.gov/health/dysphagia>
- United States Department of Agriculture Food and Nutrition Service. (2017, July 25). *Accommodating children with disabilities in the school meal programs. Guidance for school food service professionals*. Available at: <https://fns-prod.azureedge.us/sites/default/files/cn/SP40-2017a1.pdf>
- U.S. Department of Education. (2011, September). *Questions and answers on Individualized Education Programs (IEPs), evaluations, and reevaluations*. Available at: https://sites.ed.gov/idea/files/IEP.QA_September_2011_FINAL.pdf