



SECOND EDITION

BEST PRACTICES for

Occupational Therapy in Schools

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Best Practices in School Mealtimes to Enhance Participation

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KEY TERMS AND CONCEPTS

- Dysphagia
- Eating
- Feeding
- Feeding plan
- Fiberoptic endoscopic evaluation of swallowing
- Food selectivity
- Fussy eaters
- Picky eaters
- Swallowing
- Tube feeding
- Videofluoroscopy swallow study

OVERVIEW

School districts are responsible for students' safety and nutrition and hydration needs so that students can participate in school. School mealtimes may include breakfast, snack, and lunch. School breakfast and lunch programs (Healthy, Hunger-Free Kids Act of 2010; Pub. L. 111-296) are regulated by the U.S. Department of Agriculture (USDA), which has developed guidelines to require schools to substitute or modify school meals for students with disabilities (USDA, 2017). Federal laws that address mealtime supports in schools include

- Supreme Court rulings requiring school districts to provide supportive services for a student to attend school and benefit from education (*Cedar Rapids Community School District vs. Garret F.*, 1999; *Irving Independent School District v. Tatro*, 1984);
- The Individuals With Disabilities Education Improvement Act of 2004's (IDEA; Pub. L. 108-446) reference to students' functional performance (e.g., skills used during routine ADLs); and
- Section 504 of the Rehabilitation Act of 1973, as amended (2008; Pub. L. 93-112), which does not allow students to be excluded from participation in school activities (including mealtimes) solely on the basis of a disabling condition (Power-deFur & Alley, 2008).

Occupational therapy practitioners,¹ as related service providers under IDEA, work with school districts to modify

foods and adapt environments for students with special needs as well as provide services directly with students. Eighty percent of students with disabilities and 25%–45% of typically developing children have feeding and swallowing disorders, making a team approach essential (Arvedson, 2008).

Common Terms and Definitions

Broad definitions applied in this chapter are primarily from the AOTA (2017) document *The Practice of Occupational Therapy in Feeding, Eating, and Swallowing*. **Feeding** is "the process of bringing food to the mouth, sometimes called self-feeding" when completed by the individual; **eating** is "keeping and manipulating food or liquid in the mouth and swallowing it"; and **swallowing** is "moving the food from the mouth to the stomach" (AOTA, 2017, p. 2). **Dysphagia**, as defined by Lefton-Greif and Arvedson (2008), is a disorder of swallowing.

Three terms used for children who refuse food are *picky eaters*, *fussy eaters*, and *children with food selectivity*. **Picky eaters** are defined as those who consume "small amounts of food and . . . a limited variety of food" (Kim et al., 2011, p. 1364). Picky eaters often exhibit tantrums regarding food selection, slow eating, and food refusal of both familiar and novel foods (Lafraire et al., 2016). **Fussy eaters** describes children who reject foods and food textures and exhibit tantrums regarding food selection, slow eating, and food refusals of both familiar and novel foods (Lafraire et al., 2016).

¹Occupational therapy practitioner refers to both the occupational therapist and the occupational therapy assistant. The American Occupational Therapy Association (AOTA, 2014, p. S18) states, "The occupational therapist is responsible for all aspects of occupational therapy service delivery and is accountable for the safety and effectiveness of the occupational therapy service delivery process"

and "must be directly involved in the delivery of services during the initial evaluation and regularly throughout the course of intervention. . . . The occupational therapy assistant delivers safe and effective occupational therapy services under the supervision of and in partnership with the occupational therapist."

Children with *food selectivity* are those with more serious eating and feeding problems than picky eaters; they typically display the following characteristics: refusing food, limiting food choices, and having a high frequency of “single food intake” (Bandini et al., 2010, p. 260). The majority of children who are seen as picky or fussy eaters no longer exhibit these behaviors after age 6 years (Cano et al., 2015).

Tube feeding is the feeding of a liquid formula administered through a tube passed through the nose (nasogastric) or inserted into the stomach (gastric; Arvedson & Brodsky, 2002). **Fiberoptic endoscopic evaluation of swallowing (FEES)** is an instrumental assessment of the swallow (Arvedson & Lefton-Greif, 2017); a flexible tube is inserted in the nasal canal and threaded through the oropharynx to observe the swallowing process as the child eats or drinks. **Videofluoroscopy swallow study (VFSS)** is an instrumental assessment of the pharyngeal and esophageal phases using barium (Arvedson & Brodsky, 2002). This instrumental assessment can identify dysphagia, aspiration, and gastroesophageal reflux disease (GERD).

ESSENTIAL CONSIDERATIONS

Difficulties in participation during mealtimes may be caused by a variety of factors, such as environmental (e.g., too noisy, smell of foods, poor seating), activity or occupation (e.g., texture of food not safe, refuses a food on their plate), or student (e.g., poor oral-motor skills, dysphagia). Limited participation may result in poor nutrition, which lowers students' energy and alertness level; unsafe conditions; students' inability to join in social settings, such as eating lunch in the cafeteria; and behavioral issues, which can negatively affect the interaction among students and peers.

Safety and Nutrition During Mealtimes Are Critical

All students must safely receive adequate nutrition and hydration during school meals. Complex medical conditions, such as traumatic brain injury or cerebral palsy (CP), increase the risk for dysphagia in neurological conditions. Difficulties with swallowing foods, particularly novel foods, may result in increased coughing, choking, or restricted food or fluid intake (Lefton-Greif et al., 2006).

Inadequate nutrition is detrimental to a student's physical and mental health and results in poor school performance (Fiese et al., 2011; Jackson et al., 2017), such as significantly lower math and reading scores than peers in food-secure households (Jyoti et al., 2005). Inadequate nutrition is also a problem for students with poor eating behaviors, such as food selectivity and fear of trying new foods, and students with poor oral-motor skills who are unable to safely consume table foods and liquids. However, modifications and accommodations to school foods, per recommendations from a physician or dietitian, can help these students to receive proper nutrition (USDA, 2017).

Diagnostic Conditions That Affect Mealtime Performance

Students may have a diagnosis that carries secondary conditions that affect mealtime participation.

Autism spectrum disorder

Feeding and eating challenges are a recognizable part of mealtime for children with autism spectrum disorder (ASD; Emond et al., 2010; Provost et al., 2010), possibly for as many as 90% (Kodak & Piazza, 2008). Students with ASD have substantial food refusal, food restriction problems, and oral-sensory sensitivities compared with peers without ASD (Chistol et al., 2018; Provost et al., 2010), including acceptance of only a few food textures and varieties. Rituals (e.g., specific food preparation or packaging, food types) often interfere with eating both familiar and unfamiliar foods. Children with ASD who have feeding problems tend to have a greater frequency of food selectivity, such as refusing particular meats or vegetables, than children with feeding and eating disorders who do not have ASD (Cermak et al., 2010; Chistol et al., 2018; Emond et al., 2010; Field et al., 2003). Students with ASD may also exhibit oral-motor delay and dysphagia.

Food acceptance was significantly limited in all children with ASD, regardless of the severity of ASD, when compared with peers (Martins et al., 2008). Although 25%–35% of typically developing children have feeding and eating problems similar to those seen in children with ASD, these problems tend to be less severe in typically developing children and of shorter duration (Rogers et al., 2012). Children with ASD display food selectivity that persists into the teenage years, and the limited number of foods consumed does not substantially change as the child ages (Bandini et al., 2017). Children with ASD have fewer self-feeding skills, greater food avoidance, and more fear of trying new foods compared with peers (Martins et al., 2008). Children with ASD had lower body mass index and poorer nutritional intake compared with typically developing peers (Mari-Bauset et al., 2015).

CP

Calis et al. (2008) found only 1% of children ($N = 166$) ages 2–19 years (mean age = 9 years) diagnosed with CP and intellectual disability did not have dysphagia. On the basis of results with the Dysphagia Disorders Survey, Baladin et al. (as cited in Calis et al., 2008) found that 76% of the children had moderate to severe dysphagia, whereas 15% had profound dysphagia (e.g., no food by mouth); however, parents did not report dysphagia in their children. When dysphagia is suspected, the student should be referred for a medical evaluation, such as a VFSS or FEES. Symptoms such as persistent coughing, choking, or aspiration secondary to exhaustion with a long feeding session (e.g., more than 30 minutes) may indicate difficulty with oral-motor and swallowing skills.

A student with severe CP and substantial eating and swallowing problems will often experience nutritional deficits that decrease school performance (e.g., inability to pay attention, remain alert, stay healthy). A review of the nutritional status of children with CP (mean age = 6–7 years) found a high frequency of feeding problems and a high proportion of undernourished children, with oral-motor dysfunction as a contributing factor (Dahlseng et al., 2011). Children who have CP may require additional time to coordinate oral structures when eating,

and the caloric value of food may need to be increased to compensate for the potential decreased quantity of food consumed.

To identify a relationship between the severity of CP and the severity of oral-motor dysfunction, Erkin et al. (2010) studied children with CP (average age = 6 years) and found a positive correlation: The more severe the CP symptoms, the more severe the eating dysfunction. Although the use of feeding tubes is often necessary for children with CP because they have reduced oral-motor skills, Erkin et al. reported that tube feedings increased the prevalence of overweight children with CP. In addition, the feeding, eating, and drinking problems appeared to remain fairly consistent over time in children with CP (Clancy & Hustad, 2011).

Gastrointestinal issues

Gastrointestinal (GI) problems include constipation, diarrhea, and GERD. GERD is most often associated with food refusal (Field et al., 2003). In addition, 85% of children with ASD had reported GI problems that were not related to restricted diet yet contributed to a poor appetite (Gorrindo et al., 2012). Nonverbal students may express discomfort through aggression or screaming. Research proving or disproving inadequate digestion of gluten and casein does not exist.

Genetic and medical conditions

Genetic and medical conditions may result in oral-motor delays or lack of fine motor skills needed for self-feeding (Lewis & Kritzing, 2004). Children who have Down syndrome often have a reduced oral cavity size with a small jaw and low muscle tone, which contributes to problems with tongue protrusion, poor tongue control, and drooling. These issues diminish a student's ability to control the food bolus in the mouth and control fluid during drinking, which can lead to choking and potential aspiration. Although self-feeding skills are typically present by school age, food selectivity, food refusal, or restricting specific textures may interfere with eating (Field et al., 2003). Children with Down syndrome have a comorbidity (50%) of congenital heart disease, which can contribute to poor endurance for feeding, eating, and drinking.

Other disorders associated with feeding and eating problems include Pierre Robin sequence, Williams syndrome, Prader-Willi syndrome, Rett syndrome (Brown et al., 2008), and Noonan syndrome (Fonteles et al., 2013). Challenges may include difficulty chewing and swallowing foods, which may compromise the endurance and participation in the educational setting of these students. Students with esophageal atresia (e.g., the esophagus and stomach are not connected) have persistent swallowing difficulties that compromise weight gain and growth (Menzies et al., 2017). Students with myelomeningocele and an Arnold-Chiari II malformation frequently have eating and feeding dysfunction because the malformation compresses the cranial nerves in the brain stem involved with swallow coordination. Students with these disorders may have persistent difficulties with safely coordinating chewing and swallowing foods and liquids.

Mealtime Environment and Social Interactions

School lunch is often a time of social interaction, yet the school environment may be overwhelming with noise, smell, and movement. Students who are stressed during mealtimes in school may refuse to eat or not eat enough, resulting in inadequate nutrition to fully participate in the educational program (Lefton-Greif & Arvedson, 2008). Students with ASD often have eating and feeding challenges related to difficulties processing sensory information and may benefit from sitting with a few classmates in a quieter area of the cafeteria (Tomchek & Dunn, 2007). Adults who sit near or feed students with significant physical or cognitive limitations should encourage social interactions between the student and peers as much as possible. The use of a communication device during mealtime allows the student to converse with peers.

BEST PRACTICES

School occupational therapy practitioners support students in the educational setting to promote success in achieving educationally related and functional goals. These goals may include functional independence in daily living skills such as the mealtime skills of eating, feeding, and drinking, which are necessary for proper nutrition to perform in school programs.

Partner With Community, Family, and School Team

School and community-based teams must collaborate with the parents to coordinate information and develop a comprehensive mealtime plan for the student (Schultz-Krohn, 2006). The occupational therapist may help the student's individualized education program (IEP) team understand the evaluation results and implement recommendations in the student's school program. Even students who are primarily tube fed have been successfully transitioned to oral feeding in the school setting with collaboration among the family, school, and medical personnel (McKirby et al., 2008).

Communicating with the student's health care provider for medical guidance for the student's safety (e.g., family requests oral feedings for a student with a feeding tube, student appears to be aspirating foods or liquids, student has severe reflux, student fails to gain weight) is an ethical and professional responsibility. Although occupational therapists can evaluate the physiological factors of feeding, eating, and swallowing as well as the psychosocial, cultural, and environmental factors involved in mealtime, when aspiration is suspected, a referral should be made for evaluation by appropriate medical personnel to identify aspiration using procedures such as VFSS or FEES.

Evaluate Student's Strengths and Needs During Mealtimes

Occupational therapists typically interview the parent and teacher regarding the student's strengths and needs; review educational and health records and reports; observe the student during snack, lunch, or both; and use informal or formal

methods of documenting functional eating skills during participation in mealtimes. A more in-depth evaluation may be needed to determine oral-motor skills, oral-sensory skills, behavioral issues related to eating and self-feeding skills, environmental supports, and equipment needs (Aldridge et al., 2010; Ramsay et al., 2011).

This evaluation begins with gathering data for the occupational profile. During this process, the therapist identifies environmental (e.g., physical, social) supports and challenges and any specialized positioning or feeding equipment needed. Evaluation questions include

- What are the concerns or problems, and when do the problems occur?
- What factors support or limit participation in mealtimes and performance of feeding, eating, and swallowing skills in the school setting?

Record review

The occupational therapist should review the student's educational records to determine whether the child is frequently absent (e.g., chronic illness) and assess overall performance in school. The school nurse typically has health information about the student that can be accessed by the occupational therapist. With written consent from the family, best practice is to contact the student's physician, dietitian, or gastroenterologist to gain understanding about the student's ability to safely swallow foods and fluids. Instrumental assessments such as VFSS or FEES can provide discrete information about the mechanics of the student's swallow. When a family declines to authorize this communication, the IEP team (including the school nurse) must identify appropriate steps for the safety of the student's eating, feeding, and swallowing at school. For students who receive nutrition nonorally, teams should not attempt oral feedings without medical authorization.

Interview

Interviewing family and educational staff provides information about the client factors, environment (e.g., cultural, physical, social), and activity (e.g., what materials are used, what is expected). Arvedson (2008, p. 120) designed the following questions to identify eating and feeding problems and prioritize interventions:

- How long does it take for the child to eat a meal or be fed?
- Is the child dependent on others for eating and drinking? If yes, what can the child do independently or with modifications?
- Does the child refuse foods? If yes, are they proteins? Carbohydrates? Fruits? Vegetables?
- Are mealtimes stressful? If yes, what causes the stress?
- Has the child slowed or stopped weight gain during the previous 2–3 months?
- Does the child have respiratory distress?
- Does the child regularly vomit, gag, or cough during or after meals?
- Does the child become irritable or lethargic during mealtimes?

Answers to these questions, combined with a student's history of eating and feeding problems as well as evaluation data, provide a good foundation.

Observation

Observations should occur during a meal and identify the supports and barriers in the context and environment (e.g., routine lunch vs. special luncheon, size of room, seating, noises, smells, lighting, nearness of peers), the activity (e.g., food and liquid being served, utensils used), and the student (e.g., body functions and structure, performance skills, performance habits). Observation of the student's oral structure (e.g., asymmetries of the lips, jaw, tongue, or teeth that could negatively affect the ability to eat), oral-motor control (e.g., lips, tongue, jaw, cheek movements), muscle tone, endurance needed to eat an entire meal, respiration (e.g., monitor breathing while swallowing foods or liquids), and oral-sensory skills (e.g., preferred and nonpreferred textures, acceptance and refusal of temperatures or flavors) should be made to determine what supports or interferes with student participation in mealtimes.

Assessment tools

Several formal assessment tools may be used to systematically evaluate oral-motor and behavioral issues related to eating and feeding. Originally designed for persons with severe or profound intellectual disabilities, the Screening Tool of Feeding Problems (STEP; Matson et al., 2008; Matson & Kuhn, 2001) identifies feeding problems in 5 areas:

1. Risk of aspiration,
 2. Food selectivity,
 3. Feeding skills,
 4. Food refusal, and
 5. Nutritional behaviors that affect eating and feeding.
- A recent study using the STEP found that 97% of children with severe or profound intellectual disabilities living at home had a much greater chance of aspiration and problems with feeding and eating skills than children with moderate or mild intellectual disabilities (Gal et al., 2011).

A modified version of the STEP that can be used for children ages 2–18 years with a wide range of diagnostic conditions is the Screening Tool of Feeding Problems for Children (STEP-CHILD; Seiverling et al., 2011). This parent report instrument has good reliability and validity, assessing 6 areas related to eating and feeding behaviors:

1. Chewing problems,
2. Rapid eating,
3. Food refusal,
4. Food selectivity,
5. Vomiting, and
6. Stealing food.

Seiverling et al. (2011) posited that children who have problems chewing typical table foods and are not given successive opportunities to chew table foods might have difficulties developing these skills.

The Brief Autism Mealtime Behavior Inventory (BAMBI; Lukens & Linscheid, 2008) was specifically developed to identify mealtime behaviors that compromise feeding skills for children with autism, ages 3–11 years. Parents use this inventory to rate mealtime behaviors on 18 items using a 5-point Likert-type scale. The items are clustered into 3 areas: limited variety, food refusal, and features of ASD. Lukens and Linscheid (2008) demonstrated the validity and reliability of this instrument as a sensitive tool to assess mealtime behaviors in children with ASD.

The Brief Assessment of Mealtime Behavior in Children (BAMBI) was developed to serve a wider range of children with mealtime issues (Hendy et al., 2013; Seiverling et al., 2016). This instrument includes 3 subscales—Limited Variety, Food Refusal, and Disruptive Behavior—and is a parent questionnaire modified from the BAMBI for wider clinical use.

The Eating Profile (Nadon et al., 2011) is a parent report instrument developed for children with ASD. It consists of 60 items addressing a child's dietary history, health and mealtime behaviors, food preferences, and eating skills, as well as the effect of feeding in daily life. When the Eating Profile was combined with the first edition of the Short Sensory Profile (SSP; Dunn, 1999), the researchers found that 87% of the children had sensory processing problems; 65% of that subgroup had a score in the "definite difference" category and had statistically more eating problems than children with a typical performance on the SSP.

The Picky Eating Behavior Questionnaire is a parental report that provides a systematic approach to collecting data about eating behaviors for children ages 1–5 years (Kwon et al., 2017). The definition of *picky eating* used for this questionnaire is focused on 2 main elements: eating small quantities of food and eating a limited variety of foods. This questionnaire was developed to meet the need to assess the unique characteristics of children who exhibit picky eating through parental report.

Design Student's Mealtime Plan as a Team

After data have been collected from multiple sources, the occupational therapist analyzes them to determine the student's strengths and needs. Recommendations are made to the student's IEP team. Collaboration between the occupational therapy practitioner and other members of the IEP team, including the family, school personnel, and community providers, is key to successfully addressing eating and feeding problems in students with disabilities. The team develops the student's goal and identifies the need for related services.

In addition to services provided to the student, services on behalf of students may be provided by giving input on food texture and temperature, rate of presentation and amount of food, and positioning of a student to ensure the student's safety during a meal or snack (AOTA, 2017). When a student has difficulty swallowing, the practitioner educates and trains the family and school personnel to optimize these factors to facilitate safe swallowing. For some students, a *feeding plan*, which identifies the necessary equipment, positioning, and range of foods, is essential (Frolek Clark, 2003).

Implement Safe and Effective Mealtime Interventions

On the basis of professional development to establish and maintain competence in this area, occupational therapy practitioners use many effective and evidence-based interventions to enhance mealtime skills. Improving mealtime skills may require interventions that address the student (e.g., oral-motor, oral-sensory, behavioral needs), the occupation (modifications to the foods), and the environment (e.g., positioning, noise).

Biomechanical strategies for proper positioning

Many investigations have supported the use of correct sitting alignment as an initial intervention for students who have oral-motor dysfunction that limits eating and feeding skills (Ekberg, 1986; Gisel et al., 2000; West & Redstone, 2004). When a student is sitting in an upright position with the hips and trunk aligned and with the head and neck in slight flexion, the student may have more efficient oral movement and improved oral-motor control (Gisel et al., 2000). Correct alignment reduces the potential for aspiration and improves oral-motor coordination. Evidence has shown that slight neck flexion reduces the risk of aspiration for children with diminished oral-motor control (Ekberg, 1986). Moreover, environmental modifications such as adjusting table and chair height can support a student's ability to eat and self-feed.

Modifications to food

School occupational therapists often work with the family, cafeteria workers, and a student's physician to modify school meals by substituting menu items (e.g., allergy, substituting foods that do not puree well); modifying recipes (e.g., low sugar, high fiber); and changing food texture (e.g., thick liquids, pureed foods, ground foods, chopped foods), temperature, and portion size (Frolek Clark & Jost, 1999). Certification from a physician or other health care provider may be requested for food modifications (USDA, 2017). When a student receives nutrition via tube feedings, the team should determine whether blended foods or formula is necessary.

Adaptive equipment to enhance participation

Occupational therapy practitioners are knowledgeable about the skills of eating, feeding, and swallowing in the school environment and understand how equipment supports or interferes with function; therefore, their input to the educational team is crucial in addressing the needs of students (Lane, 2012). They should determine whether adaptive equipment, such as modified utensils, plates, cups, and straws, is needed to support a student's participation in meals and snacks in the educational setting (AOTA, 2017). In addition, practitioners are responsible for training school personnel in the use of equipment.

Social Stories

Occupational therapy practitioners understand the importance of a student's ability to socialize during lunch. Social Stories are an opportunity for the occupational therapy practitioner and student to write a brief scenario about the lunchroom setting and what to expect (Twachtman-Reilly et al., 2008). The practitioner and student can write a Social Story (Gray, 2000; Gray & Garand, 1993) about the cafeteria, the interaction with friends, and how to respond to the smells by asking to use the bathroom when the sensory experience becomes overwhelming. A series of systematic supports can be used to allow the student to develop the

habits and skills needed to eat in the school cafeteria on a consistent basis by using a series of Social Stories to cover a variety of situations during mealtime.

Hands on with student and education of adults

Occupational therapy practitioners use clinical reasoning to apply these strategies and to educate and train others in their use.

Oral-motor strategies. Oral-motor strategies include changing food texture; allowing more time for eating, biting, and chewing opportunities; and strategies for lip, tongue, jaw, and cheek movements. Gisel and Alphonse (1995) found that children with severe oral-motor problems required longer eating times for both solid and pureed foods, children with moderate oral-motor impairments had some difficulties with solids but primarily with pureed foods, and children with mild oral-motor deficits ate soft solids at a slower rate. School occupational therapy practitioners should recommend particular types of food and time needed for eating for students with oral-motor difficulties.

Students with CP, particularly with those with severe motor impairments, benefited from oral-motor intervention to foster improved lip closure and chewing (Baghbadorani et al., 2014; Gisel, 2008). These improvements translated into more efficient intake of food during meals. Specific oral sensorimotor exercises practiced 3 times per week across 24 sessions resulted in improved lip closure on the spoon during eating, control of food during swallowing, and chewing (Baghbadorani et al., 2014). Oral-motor therapy has also been effective in improving strength of lingual musculature, control of the bolus, and improved lip closure during oral transit (Fonteles et al., 2013).

Strategies for food refusal. The interventions described to improve eating and feeding skills specific to food refusal are the results of systematic programs implemented in home or clinical settings. Judicious use of these strategies in the school setting may be beneficial:

- Improve attention and in-seat behavior so student can participate in the meal. May need short break (e.g., get a straw and return); use visual schedule.
- Establish food routines. Toomey (2002) recommended each meal consist of 1 protein, 1 starch, and 1 fruit or vegetable; Janzen (2003, p. 419) recommended eating sequences such as “take a bite, chew, swallow; take a bite.”
- Choose small portions; combine new foods with familiar foods; select new foods that are close in flavor, appearance, or texture to preferred foods. Use peer modeling (Ernsperger & Stegen-Hanson, 2004).
- Expand range of acceptable foods through oral exploration (e.g., taste, temperature, texture). Add condiments to increase vegetable consumption (Ahearn, 2003).
- Provide motivators for eating appropriately (e.g., social praise, attention, stickers) and follow eating with preferred activities (Janzen, 2003).
- Provide specific strategies to manage sensory sensitivities (see next section).

Specific sensory sensitivity strategies. Sensory sensitivity strategies can be used when students exaggerate sensory responses related to the environment (e.g., too much sensory stimulation) or to food (e.g., certain smells, visual images, textures, temperatures) that affect their feeding and eating behavior or are barriers to eating (Ernsperger & Stegen-Hanson, 2004). Occupational therapy practitioners can use systematic sensory strategies to expand the student's range of acceptable foods (Schultz-Krohn, 1997), such as placing 2 similar foods, 1 preferred and 1 less preferred, on the same plate. The student selects the preferred food while being exposed to a less preferred food.

This process of approximation has been used successfully to introduce oral feeding to children who have had prolonged tube feedings (Harding et al., 2010). This approach can be effective in reducing the fear and anxiety often seen in students with sensory sensitivities related to foods and eating.

SUMMARY

School occupational therapy practitioners have a critical role in mealtime skills for students with special needs. Occupational therapists evaluate physiological, psychosocial, cultural, and environmental factors that support or limit mealtime performance, specifically feeding, eating, or swallowing. Interventions provide strategies as well as food and equipment modifications, adaptive equipment, environmental adaptations for safe eating and drinking habits, and education or training for families and others (AOTA, 2017). These services focus on improving the student's ability to participate in snacks and meals served in the school and foster independence in self-feeding skills as needed.

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