

## BACKGROUND



Feeding difficulties in early childhood are common globally and affect approximately 25% of typically developing children and up to 80% of children with developmental disabilities (Estrem et al., 2017). As medical technology has advanced, a greater number of infants are surviving extreme prematurity and anomalies that would have previously been lethal; infants who are born premature are living longer and often develop co-occurring conditions that contribute to their risk for the development of feeding problems (Estrem et al., 2017). Some children with feeding difficulties may be diagnosed with a Pediatric Feeding Disorder (PFD). A child with a PFD will demonstrate impaired oral intake that is not age-appropriate, and is associated with medical, nutritional, feeding skill, and/or psychosocial dysfunction (Goday et al., 2019). Current literature has concluded that a PFD will negatively impact the health outcomes of the child, resulting in negative psychosocial consequences for the entire family; furthermore, a PFD will often lead to caregiver stress and adversely impact the physical growth and cognitive development of the child (Ausderau et al., 2019).

Because a PFD affects the child in addition to the entire family, involving the family in the treatment process as much as possible is fundamental. "Engaging parents of children with feeding problems in assessment and treatment of the child is critical, not because they were the cause of the problem, but because they are the proximal agents for change in the child's natural environment (Estrem et al., 2017)". A study conducted by Sharp, Burrell, and Jaquess (2014) emphasizes that feeding interventions are more effective with family involvement rather than with specialists alone; the study further states that caregiver involvement may also enhance parent well-being, including increased positive affect, reduced stress, and improved self-efficacy. Treatment that is parent directed facilitates generalization to the home environment, improves interactions between the parent and the child, and maximizes the amount of intervention a child can receive (Sharp, Burrell, and Jaquess, 2014). Facilitating positive experiences and interactions with food and family members during mealtime will enhance the well-being of the child as well as the family.

## PROGRAM DETAILS

**Mission:** The mission of Family Feeders is to establish safe and healthy eating patterns while enhancing family mealtime routines and decreasing caregiver burden. This program will enhance the provision of feeding therapy services by involving the whole family in the treatment process.

**Vision:** To provide services that enhance quality of life through safe and positive interactions with food.

Family Feeders will offer the following services:

- Parent/Caregiver education
- Home exercise and feeding programs
- Pre-feeding sensory regulation
- Play based feeding activities
- Sensory processing (8 sensory systems involved in feeding)
- Food exploration
- Postural control and alignment
- Systematic desensitization
- Oral motor awareness
- Oral motor strengthening
- Oral motor coordination
- Behavioral techniques (token economy, positive reinforcement, etc.)
- Skills for self-feeding
- Peer modeling (siblings)

## 10 MYTHS OF MEALTIME

(Toomey & Associates, Personal Communication, December 4, 2016)

1. **Eating is the body's #1 priority.**
  - Breathing is the body's #1 priority; postural stability is the body's #2 priority; eating is your body's #3 priority.
2. **Eating is instinctive.**
  - Eating is driven by instinctive appetite only for first month of life (4-6 weeks); eating from 1-6 months is driven by primitive motor reflexes; eating after 6 months is a learned behavior.
3. **Eating is easy.**
  - Eating is a skill-based task that uses all 8 of our senses at once.
4. **Eating is a two-step process: 1 = sit down, 2 = eat.**
  - Eating is a 25-32 step process that begins with the sensory systems.
5. **It is not okay to play with your food.**
  - Wearing your food is part of the process of learning to eat that food!
6. **If a child is hungry enough, he/she will eat. They will not starve themselves.**
  - If a child does not have the skills, they cannot eat.
7. **Children only need to eat 3 times per day.**
  - After 16-18 months, children (and adults) need to eat approximately every 2.5 to 3 hours during the day.
8. **A child who won't eat has EITHER a behavioral OR an organic problem.**
  - Feeding problems often result from multi-factorial causes (medical, psychosocial, environmental, behavioral, etc.)
9. **Certain foods are eaten only at specified times of the day, and only certain foods are "healthy for you".**
  - This is an arbitrary concept. You can eat any type of food at any time of the day. Junk foods have the least amount of oral motor and sensory demands; therefore, they are typically easier to eat.
10. **Mealtimes are a proper social occasion. Children are to "mind their manners" at all meals.**
  - Functional skills for eating come FIRST, manners come second. Emphasizing manners can negatively affect play and skill development.



## FOCUSED QUESTION

Will the quality and longevity of feeding treatment outcomes improve as caregiver and sibling involvement increases?

## METHODS

Family Feeders is a 12-week pediatric feeding program that is designed to establish safe and healthy eating patterns in children ages 2 to 12. This program is conducted by an occupational therapist who can evaluate and treat children experiencing difficulties with oral motor coordination, food selectivity, and disruptive mealtime behavior. A speech-language pathologist may also be included in this program if the child is receiving speech therapy services. Family Feeders involves the parent/caregiver as well as siblings in the treatment process to enhance the quality of feeding therapy and improve the carryover of treatment outcomes into the home.

Children in the program will receive feeding therapy two times per week with the expectation that a caregiver, and when appropriate a sibling, will attend one of the two sessions each week. This program is designed to be flexible in that each treating therapist can determine which client factors will be addressed within the feeding sessions as well as determine which treatment approach would be the most appropriate. Each child's experience with feeding as well as their experience of family mealtimes is unique and will require an individualized, client-centered approach to their feeding goals. Although the interventions delivered within the feeding sessions may vary between clients, the structure of the program should remain the same.

## RESULTS

**The following goals and objectives are the intended results of this program:**

1. **Goal:** Establish safe and healthy eating patterns in children with feeding difficulties to improve nutritional intake and decrease caregiver burden.
  - **Objective:** Children participating in the program will attend and participate in 2 feeding sessions per week for the duration of 12-weeks with no less than a 90% attendance rate (22 out of the 24 required sessions)
  - **Objective:** Children will participate in pre-feeding routines (i.e. sensory regulation, oral motor exercises, etc.) at the beginning of each feeding treatment session (as warranted) to aid in establishing safe and healthy eating patterns.
2. **Goal:** Increase generalization of treatment strategies into the child's natural environment by teaching the caregiver effective feeding interventions and mealtime routines that can be easily implemented to increase longevity of treatment outcomes.
  - **Objective:** A parent/caregiver will attend one feeding therapy session per week for the duration of the 12-week program with no less than a 90% attendance rate (11 out of the 12 required sessions).
  - **Objective:** The parent/caregiver will implement at least one feeding intervention learned that week into family meals in the child's natural environment
3. **Goal:** Improve quality of life in children and families of children with feeding difficulties by facilitating positive interactions between the caregiver and child during feeding.
  - **Objective:** The parent/caregiver will demonstrate appropriate and positive interactions with the child during therapy meals to decrease child/caregiver stress and improve appetite.
  - **Objective:** The parent will demonstrate baseline knowledge in feeding therapy prior to beginning the program as evidenced by completion of the free SOS Approach to Feeding Parent/Caregiver Workshop: <https://www.youtube.com/watch?v=q11JrhG7gY&t=3s>

## BOTTOM LINE FOR OT

Occupational therapists have the skills and competency to assess and treat difficulties associated with feeding, eating and swallowing. The profession's holistic perspective recognizes and assesses not only the physiological factors, but also the psychosocial, cultural, and environmental factors that are involved with these aspects of an individual's daily performance. Occupational therapists have specialized skills in activity analysis and synthesis which allows them to consider the interplay of physical, environmental, and sociocultural factors when providing services to individuals with feeding difficulties.

Intervention delivered by an occupational therapist will focus on the components that enhance a person's ability to participate in feeding and eating activities of daily living that are valued and fulfilling to that person; these components may include eating independently, joining friends or family for lunch, and feeding a child. Occupational therapists involve caregivers and family in the treatment process to improve treatment outcomes and enhance the quality of intervention. Feeding, eating, and swallowing interventions delivered by an occupational therapist can include environmental modifications, positioning, use of adaptive equipment, feeding and swallowing strategies and remediation techniques, and client and caregiver education.



## REFERENCES

- Anonymous. (2017). The Practice of Occupational Therapy in Feeding, Eating, and Swallowing. *The American Journal of Occupational Therapy*, 71, 1-13.
- Ausderau, K., St. John, B., Kwaterski, K., Nieuwenhuis, B., & Bradley, E. (2019). Parents' strategies to support mealtime participation of their children with autism spectrum disorder. 73(1) doi: <https://doi.org/10.5014/ajot.2019.024612>
- Chamberlin, J., Henry, M., Roberts, J., Sapsford, A., Courtney, S. (2014). An Infant and Toddler Feeding Group Program. *American Journal of Occupational Therapy*, 45(10):907-911. <https://doi.org/10.5014/ajot.45.10.907>
- Dreamstime (2000). Funny cute family playing with food [Photograph]. Retrieved from <https://www.dreamstime.com/stock-photo-funny-cute-family-playing-food-kitchen-image61566277>
- Estrem, H., Pados, B., Park, J., Knaff, K., & Thoyre, S. (2017). Feeding problems in infancy and early childhood: Evolutionary concept analysis. *Journal of Advanced Nursing*, 73(1), 56-70.
- Goday, P., Huh, S., Silverman, A., Lukens, C., Dodrill, P., Cohen, S., Delaney, A., Feuling, M., Noel, R., Gisel, E., Kenzer, A., Kessler, D., Kraus de Camargo, O., Browne, J., Phalen, J. (2019). Pediatric feeding disorder: Consensus definition and conceptual framework. *Journal of Pediatric Gastroenterology and Nutrition*, 68(1), 124-129. doi: 10.1097/MPG.0000000000002188
- Learning Liffoff (2016). 5 Tips to Turn a Picky Eater into a Healthy Eater [Photograph]. Retrieved from <https://www.learningliffoff.com/5-tips-to-turn-a-picky-eater-into-a-healthy-eater/>
- Sharp, W. G., Burrell, T. L., & Jaquess, D. L. (2014). The Autism MEAL Plan: A parent-training curriculum to manage eating aversions and low intake among children with autism. *Autism*, 18(6), 712-722. <https://doi.org/10.1177/1362361313489190>
- Valley Health System (N.D.). Feeding with Nasogastric Tube [Photograph]. Retrieved from <https://www.valleyhealth.com/services/kireker-center-child-development/feeding-therapy>