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Best Practices in Weaning Children off Tube Feeds to Oral Intake

Kylie Abernathy, OTS & Andrea Newton, OTS

Case

In an outpatient pediatric clinic, the multidisciplinary team frequently works with the child to promote oral intake. Assessments and questionnaires were utilized to identify challenges faced by the client ability to properly intake food. The OT was approached by the child's family to help meet their feeding goals to make mealtime more enjoyable. As the OT is generally not involved in the act of proper weaning technique, they are interested in what steps they can take to provide the family with support and to develop subsequent feeding skills.



1 Ask: Research Question

What are the best practices to assist in weaning children (ages 0-3) off tube feeds and increasing oral intake?

2a Acquire: Search Terms

Patient/Client group: Children, Infant **Intervention:** Weaning, Gastrostomy Tube, Hunger Provocation, Escape Extinction, support
Comparison: Typically Developing Children **Outcome:** Oral Intake

2b Acquire: Selected Articles

Howe et al. (2013): A systematic review that assessed the effectiveness of occupational therapy interventions regarding children with feeding, eating, and swallowing difficulties.

Williams et al. (2007): A quasi-experiment that examined various behavioral techniques in a day treatment program to support independent oral intake for children suffering severe feeding problems.

Byars et al. (2003): A quasi-experiment that assessed the effectiveness of a multicomponent behavioral program for oral aversion in children dependent on gastrostomy feedings.

3a Appraise: Study Quality

Howe et al. (2008): Level I study, systematic review of 34 different studies meeting inclusion criteria. Foundation for future research. Generalization is limited do to sample sizes and insufficient description of interventions.

Williams et al. (2007): Level III study concluding that there may be other confounding variables affecting the results. Other psychological benefits were not examined. Sample size relatively large (N=46) for this area of research.

Byars et al. (2003): Level III study. incorporated family-focused intervention to support loved ones. Strict inclusion criteria. Lack of adequate sample size (N=9) and control group.

3b Appraise: Study Results The findings of these studies suggest that occupational therapy interventions including, escape extinction, seating position, manipulation of feeding methods, shaping, differential attention, and positive reinforcement are effective in the process of weaning children from tube feeds to oral intake. Multidisciplinary teams worked together to execute and maintain the child's health and progression towards oral intake. Furthermore, results showed that including the family can benefit the child and the family dynamic as a whole. Results were obtained through multiple steps, strict inclusion, and the help from a variety of professionals.

4 Apply: Conclusions for Practice Based on the findings of the effectiveness, the occupational therapist would work on feeding skills, the family dynamic, and adaptations once the child is participating in oral intake. Occupational therapists will be involved in the recovery process in the child's oral intake feeding skills. The occupational therapist would also treat if there are any food selectivity, oral motor, or feeding issues that occur due to their feeding history. Evaluating the child at a younger age is beneficial for positive results regarding independent oral intake.

References:

Byars K, C., Burklow K. A., Ferguson K., O'Flaherty, T., Santoro, K., & Kaul, A. (2003). A multicomponent behavioral program for oral aversion in children dependent on gastrostomy feedings. *Journal Pediatric Gastroenterology & Nutrition*, 37(4):473-480. Retrieved from file:///C:/Users/Owner/Downloads/A_Multicomponent_Behavioral_Program_for_Oral.14%20(1).pdf

Howe, T.-H., & Wang, T.-N (2013). Systematic review of interventions used in or relevant to occupational therapy for children with feeding difficulties ages birth-5 years. *American Journal of Occupational Therapy*, 67, 405-412. doi:10.5014/ajot.2013.004564

Williams, K. E., Riegel, K., Gibbons, B., & Field, D. G. (2007). Intensive behavioral treatment for severe feeding problems: A cost-effective alternative to tube feeding. *Journal of Developmental and Physical Disabilities*, 19, 227-235. http://dx.doi.org/10.1007/s10882-007-9051-y

Yes, a combination of various behavioral approaches is shown effective to increase independent oral intake for a child. OTs should note that each child's intervention may vary depending on their prior medical history and diagnosis.

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