Educational & Developmental Intervention Services (EDIS) Personnel Development

KIT

Keeping In Touch

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*Inside this edition*

"Supporting Families of Young Children with Feeding Challenges."



# Resource Article

For very young children the establishment of positive feeding experiences not only influences a child's nutrition, growth, and development, it provides rich opportunities for social interaction, communication, and increasing independence. But when feeding challenges are present, the consequences may impact these outcomes and the challenges often extend into the preschool years. Feeding behaviors learned as toddlers can be difficult to change. A family-centered approach to feeding disorders, however, can improve feeding outcomes for infants and young children, lead parents to increased feelings of confidence, and lessen overall stress in the household.

Bahr and Johanson (2013) suggest that familiarity with feeding milestones will be useful to ascertain the level at which a child is feeding and from here the family may better plan for their child's next feeding steps. A number of resources are available for families to explore a child's feeding difficulties. ASHAs Infant Feeding History and Clinical Assessment Form (infant 6 months and younger) is rather extensive and can be found at http://www.asha.org/uploadedFiles/Infant-Feeding-History-and-Clinical-Assessment-Form.pdf; there is also a counterpart for the next age group, Infant Feeding History and Clinical Assessment Form (infant 6 months and older) and it can be found at http://www.asha.org/uploadedFiles/Pediatric-Feeding-History-and-Clinical-Assessment-Form.pdf.

Both of these resources may be well suited for children with medical involvement. Early intervention providers with experience in feeding may complete these forms with families to better determine next steps, such as referral to a feeding specialist, nutritionist, and/or gastroenterologist, etc. But there are also less technical and perhaps more parent friendly options that could also be useful, such as The Feeding Demands Questionnaire (FEEDS) http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2917044/figure/F1/, which targets the child's behaviors and parents' attitudes about the feeding experience for the child. This resource may be better suited for children with behavior-related feeding issues (e.g., picky eater).

# Resource Article (continued)

When a family decides to pursue their child's feeding challenges, consideration must be made to address nutritional concerns initially. Once it has been established the infant/toddler is consistently getting adequate nutrition, the behaviors affecting feeding can be targeted. Looking at feeding milestones (see an example of such milestones in the March 2016 KIT Consultation Corner for a handout of Critical Motor & Oral-motor Milestones for Feeding at: https://www.edis.army.mil/KIT/2016/KIT_March_2016.pdf) is a good way to explain to parents where a child is at and what the next steps may be.

The way in which providers assist families with understanding and addressing their child's behavior, in large part depends upon the attitudes parents exhibit when feeding their children. Bahr & Johanson (p.166) refer to Kaminski, Valle, Filene & Boyle (2007) commonalities of effective parent/caregiver training:

1. Teaching parents and caregivers to interact positively with children (e.g., to demonstrate enthusiasm, to give positive attention for appropriate behavior, to interact in the child's level during play).
2. Teaching parents and caregivers effective emotional communications (such as active listening, identifying and dealing with emotions, and reduction of negative communication).
3. Teaching parents and caregivers the effective use of disciplinary consistency (e.g., time out).
4. Requiring parents and caregivers to practice new skills during training.

The authors recommend using environmental supports, which may be discussed, demonstrated, practiced, and problem-solved during home visits. Specific steps for establishing a family mealtime routine include (p. 167):

1. Setting a schedule of mealtimes and snacks at home
2. Allowing autonomy and independence with self-feeding
3. Providing exposure to a variety of tastes, textures, and food groups
4. Appropriate food presentation and portions for the child's age and skills level
5. Limit setting
6. Overall behavior management strategies

Families with feeding challenged infants and toddlers often experience significant stress around the feeding routine. Early intervention providers can work with families to carefully consider a child's current feeding skills, feeding milestones, parent attitudes/behaviors and support strategies can be discussed, demonstrated and practiced. It's through this type of collaboration that parents will gain knowledge, experience and increased confidence and competence in feeding their young ones.

Bahr, D. & Johanson, N. (2013). A family-centered approach to feeding disorders in children. *Perspectives on Swallowing and Swallowing Disorders (Dysphagia), 22*(4), 161-171.

# What do the data say?

### What are the benefits and barriers to shared family mealtime with toddlers and young preschoolers?

To help answer this question we look to the work of Quick, et al. These researchers conducted focus groups to understand the complex joys and challenges of shared family mealtime with very young children. The benefits, in terms of natural learning opportunities for young children, are plentiful. For example, children can learn to socially interact with others, master ways to ask for things, learn the names of different foods and mealtime tools, use tools for eating and drinking, try new and favored foods, learn to wait and take turns, respond to others emotions, benefit from well balanced meals, and so much more. There are of course challenges as well, especially considering the demands and capacity of toddlers and young children.

Using Rosenstock's Health Belief Model as a backdrop, these researchers explored the benefits and barriers of sharing family mealtimes with toddlers and young preschoolers. Additionally, explored was the overall course of action families choose in light of their perceived capacity to prepare and execute shared mealtimes. By understanding these factors, we can begin to understand the type of information that may help promote shared family mealtime with toddlers and young preschoolers.

Study data were collected through 6, hour long focus groups including parents with children less than 5 years of age. Participants (n=24) included 22 females and 2 males. The participants were divided into 6 groups with similar demographics. Nine open-ended questions about shared mealtimes were asked of each group.

With regard to benefit, children's natural learning opportunities was a frequent theme that emerged. It was believed that if children had a shared family mealtime experience as a young child they would be more apt to repeat it and value it when they became adults and parents. Additionally, teaching manners, shared responsibility, cleaning up, and even learning about how to cook were other noted learning benefits. Enhanced family connectedness was another emerging theme. Parents shared that family mealtime presents an opportunity for all to know what's happening in children's lives and to build family relationships. Healthy eating was another recognized benefit, as planning meals for shared dining tended to result in better balanced meals with greater nutritional value.

Considering barriers, parents identified child behavioral issues as the leading challenge. Specifically, problematic behaviors, such as throwing food, pinching siblings, playing with food, and developmental challenges, such as messy eating and picky eating were identified. Interestingly, a concern was raised about "ill-prepared" husbands. Of course the majority of participants were mothers, so that must be factored. These stated concerns were regarding the mealtime role of the husband, and specifically not knowing how to cook, not cooking a variety of well balanced meals, or not sufficiently cleaning up during meal prep and following the meal. Other emerging barriers were around time & scheduling, often due to work demands.

Information gleaned about the development of promotional messages to encourage shared mealtime with young children included the associated positive outcomes, the realization that it takes time, but the investment pays off in the long run in terms of emotional connections. Another element was development of easy nutritional food recipes, as well as strategies to overcome the barriers of challenging behaviors, scheduling difficulties, and general family dynamics. Yet, another important point was that promotional messages should acknowledge family individuality and that there is no "one-size-fits-all" approach to shared family mealtime. This point is particularly important in light of early intervention and knowing that intervention must make sense in the context of the family if it is going to be implemented. Good ideas for planning and executing shared family mealtime are distinctive to individual families and only effective if they are doable within the unique routines and activities of a family.

Quick, B. L., Fiese, B. H., Anderson, B., Koester, B. D., & Marlin, D. W. (2011). A formative evaluation of shared family mealtime for parents of toddlers and young children. *Health Communication, 26*, 656-666.

# Consultation Corner

From March - August 2016 we are excited to have **Dr. Kay Toomey** as our Consultation Corner expert.

**#1 – Please discuss the practice of grazing versus scheduled meals only. Are there reasons why parents chose to allow their children to graze, and is that okay?**

The short answer to this question is "no, it is not okay to allow children to graze". However, let's talk about why children want to graze, why parents allow their children to graze and how grazing interferes with children's eating.

There are a variety of reasons why children want to graze, but this type of schedule most often occurs as a result of a child having a feeding difficulty. Typically developing children will generally begin to shift themselves onto a Feeding Schedule very early in life. While parents can influence a child moving onto a feeding schedule, if the parent is accurately responsive to their child's hunger cues, they will find that newborn infants eat about every 1.5 to 2 hours. Between 1 and 2 months of age, breast fed babies transition into eating more consistently every 2 hours and if formula fed, may be eating at 2.5 hour intervals. Between 2 and 3 months of age, most babies are shifting somewhere between a 2 to 3 hour feeding schedule. By 4 months of age, many babies are beginning to eat a slightly different time intervals depending on the time of the day. For example, some breast fed babies will want to eat closer to every 3 hours during the daytime and then shift back to every 2 hours in the early evening to "stoke themselves up" to go a longer stretch at some point during the night (e.g. a 4-5 hour stretch). Some formula fed babies may be going as long as 3.5 to 4 hours in between daytime feedings. Between 4 and 5 months of age, many babies are eating every 3.5 to 4 hours. Most of the medical experts in the field give guidelines based more on volumes that an infant eats at different ages versus a schedule of feeding (e.g. http://www.hopkinsmedicine.org/healthlibrary/conditions/pediatrics/feeding_guide_for_the_first_year_90,P02209/

In the 5-6 month age range, babies are generally introduced to some type of complimentary solid food; rice or oat cereal, pureed baby fruits or vegetables. Once solid foods are introduced, babies actually begin to eat more frequently than they had been previously. An example of a feeding schedule for an infant who has been introduced to solid foods might look like the following:

| 6 Months to 7 Months: Breast/bottle feedings (6-7x's/day) and Baby Foods (2x's/day) | |
|---|---|
| **Typical Times** | **Food Offered** |
| 4-5am | - breast/bottle |
| 7-8am | - breast/bottle |
| 8-9am | * offer first baby food solids (baby cereal + baby food puree mixed together and fed to the child) |
| 10-11am | - Nap: breast or bottle usually takes place just before nap |
| 1-2pm | - breast/bottle (may take another nap immediately after) |
| 4-5pm | - breast/bottle |
| 6ish | * offer second baby food solids feeding while family is eating too (plain baby food puree without cereal) |
| 7-8pm | - breast/bottle |
| 10-11pm | - breast/bottle |

# Consultation Corner (continued)

This type of schedule is supported by the World Health Organizations' study in 2006 that showed the average number of times a 6-12 month old infant eats is 11 times a day. This includes breast, bottle and solids feedings.

Because of how frequently children between 6 and 18 months of age are actually eating, professionals in the field of Feeding Disorders do not typically talk about a "grazing" feeding schedule during this age range. However, a 4-6 month old infant who is still eating every 1-2 hours would be considered to be grazing. Similarly, a child over 18 months of age who wants to eat every 1-2 hours would also be considered to be "grazing". After 16-18 months of age through early school age, children should be eating about every 2.5 to 3 hours across the course of the daytime.
We find clinically that young infants who are grazing are often doing so because the task of eating is painful (e.g. gastroesophageal reflux) or because their eating skills are not very good (e.g. not making it through the shift from reflexive eating to voluntarily controlled eating at 4-6 months). These children learn to eat just enough to "take the edge off" their hunger, and then they stop this difficult eating task. However, because they have not really eaten an adequate volume of food, they cannot go very long before they will need to eat again. Therefore, a grazing feeding schedule is often times a sign that something about the child's eating is not going well.

Around 12-14 months of age, children want to become more independent in their eating (see March and April 2016 newsletters) and they are often more interested in exploring their world than eating also. As a result, there is a natural flattening of the previously steeply increasing growth curve seen for all children in this age range. Some parents report that they fell their child "must be growing on air" because they feel like their child is eating so little. A parent who becomes very stressed and believes their child isn't eating enough may start to feed their child more frequently. This is because they are thinking like adults and believe that if they just feed their child more often or whenever their child wants food, their child will gain weight better just like an adult who grazes gains weight. When adults graze, we can get "as big as barges". This is because when adults graze, we don't stop until the whole row of Oreos is gone, or the whole pint of ice cream is gone. Adults graze based on package size. This is not how young children graze. Toddlers eat just enough to "take the edge off" their hunger and then they escape the eating situation. As with infants, this means they haven't eaten enough to go longer than 1-2 hours before needing to eat again.

However, it is more common that a child will shift their own selves onto a grazing feeding schedule than it is a parent who shifts their child into grazing. Again, a child older than 16-18 months of age who is grazing and eating more frequently than every 2 hours should raise red flags about a feeding disturbance.

# Consultation Corner (continued)

Many children whose eating is not going well from an oral-motor and/or a sensory standpoint learn quickly to eat just enough of a very easy-to-chew, high sensory value type of food (e.g. cinnamon graham cracker, cheddar Goldfish) to dampen down their hunger very quickly, and then they escape the meal. Additionally, some of these children learn that if they eat something that is really sweet on (e.g chocolate milk, juice, candy), they can suppress their hunger even quicker. Usually we have a 20 minute appetite window. A very sweet taste can cut that down to 10 minutes. Young children who graze can actually take 50% FEWER calories in a day than a child who is eating on an every 2.5 to 3 hour feeding schedule. The child who grazes may only eat 30 calories of something sweet every hour/hour and a half. But the child who sits to a meal with a strong appetite can often consume between 150 to 200 calories in a sitting (depending on their age). Whereas, in the same 3 hour timeframe, the child who is grazing may only eat 60-90 calories.

**#2 – What about the child who just wants to drink milk?**

One of the "foods" children like to graze on is milk. This is because milk is slightly sweet, it is generally highly familiar, it has minimal sensory properties to deal with, and it is very easy to consume a lot of volume quickly. Similarly to the child who is grazing, the child who primarily only wants to drink milk is of concern because this behavior is a red flag for some type of feeding challenge. When children's eating skills are sufficient, they don't need to engage in these atypical strategies to get their caloric and/or hunger needs met. We generally think about a child older than 16-18 months of age as receiving at least 60% of their food through solid foods and only about 40% maximum through fluids (Fox, 2006).

**#3 – How do we help these children?**

Parents are often advised to change their child's schedule radically overnight and/or to cut them off the milk "cold turkey". When giving feeding recommendations, we do not find it helpful to suggest radical, rapid changes. We talk to our families about needing to "wean our children out of every old behavior and into every new behavior". Whether a child is grazing or only drinking milk, the first thing to do is have them be seen by a Feeding Specialist to identify the reasons why the child is engaging in these behaviors. The first line of intervention is then to build better skills so the children aren't reliant on these strategies. While a Feeding Therapist is working on skill development, the family needs to be slowly weaning the child onto a new feeding schedule and off of their high volumes of milk.

# Consultation Corner (continued)

The goal is to have the family stall the child who asks for food/fluid every hour by at least 15 minutes. They can "stall" by using distraction, by giving the child some water first, and/or engaging the child in another activity that is more interesting. Using a variety of stalling techniques across a 3 day time period, the family should find that the child can now go 1 hour and 15 minutes before asking for food/fluid. The parents then stall for another 15 minutes beyond this time and shift their child to an hour and a half schedule feeding schedule. It takes about 3 days for the child's appetite and feeding schedule to shift to a new time interval. As such, it will take a lot of work and patience on the parents' part to fully transition their child to a more normal 2.5-3 hour feeding schedule.

To decrease the child's over reliance on milk, we work on having 4-6 small meals a day at 2.5 to 3 hour intervals. These meals each begin with the Mealtime Routine as outlined in the May newsletter of giving the child a warning, washing hands and family style serving. For the child who drinks a lot of milk, all of their meals begin with solid foods and the milk is held until after at least the ½ way point in the meal. They can have water before this point if needed. As the child improves their skills in Feeding Therapy, the family will see the child's solid food intake increase and the amount of milk they drink at the end of the meals decrease over time. In effect, the children will be weaning themselves out of needing so much milk.

Good luck with the children you work with and their families. Find those feeding therapists in your communities who have had training in the SOS Approach to Feeding program as they will be able to help you implement these strategies as well as provide Feeding Treatment for your patients/clients. For our last newsletter, we will be discussing the unique feeding issues of children on the Autism Spectrum.

http://www.hopkinsmedicine.org/healthlibrary/conditions/pediatrics/feeding_guide_for_the_first_year_90,P02209/

"Complementary feeding in the WHO Multicentre Growth Reference Study" WHO Multicentre Growth Reference Study Group, Acta Paediatrica, 2006 (450): 27-37.

Fox, M. K. (2006). What are kids eating? FITS data reveals unhealthy trends appearing in toddlers. *Pediatric Basics, 112*, 2-17.

# On the WWW

The website Feeding Matters (https://www.feedingmatters.org) includes helpful information about feeding. The different sections include Parents and Families, Resources and a Video Library. Also included is a useful questionnaire (provided in both Spanish and English) that can be tailored according to a child's age.

When completing the questionnaire, informational boxes will pop up to coach the parent about that particular item (e.g., Does your baby like to be fed?). Once the results are tabulated, red or blue flags will appear next to each item suggesting level of concern. The questionnaire can then be emailed or printed to further discuss with a provider.

Be sure to check out the video library too. It includes helpful tips on understanding the fundamentals and complexities of feeding.

# Continuing Education for KIT Readers

The Comprehensive System of Personnel Development (CSPD) is offering a continuing education opportunity for KIT readers.

In line with the focus on *Supporting Families of Young Children with Feeding Challenges,* readers are invited to receive continuing education contact hours for reading the monthly KIT publications (March through July 2016) and completing a multiple-choice exam about the content covered in these KITs.

KIT readers will receive the exam in August 2016. There is no need to register for the CEUs. Rather, if you are interested complete the exam online at www.edis.army.mil

Upon successful completion of the exam, you will receive a certificate of non-discipline specific continuing education contact hours.

KIT Newsletters are available online at **www.edis.army.mil**

*Thank you for your continued interest in the KIT.*