

Encouraging Healthy Eating Behaviors in Toddlers

Learning healthy eating habits....toddlers are the place to start.

**Larra Brawley and
Jennifer Henk**

Young children's eating behaviors have a direct link to their future health and attitudes regarding food. Similarly, positive nutrition during the toddler years leads to increased brain development and thus children are generally healthier (Weaver, More, & Harris, 2008). This makes eating behaviors extremely important. During the toddler years children begin to eat table foods similar to adults. The adult role includes choosing food, encouraging children to listen to their bodies, and facilitating interaction and learning. The adult decides what to serve the child and, based on what is offered, the child will decide what and how much to eat (Horodyski & Stommel, 2005). In providing the child with food options, the adult may also reflect and respect the child's home and cultural experience with the food that is presented (Ziegler, Hanson, Ponza, Novak, & Hendricks, 2006).

Let's consider the following scenario between caregivers ("Ms. Lindsey" and "Ms. Irma") and their toddlers:

Imagine Ms. Lindsey sitting at a table as she eats lunch with five young toddlers. The children eat their lunch with a combination of hands and utensils. Ms. Lindsey waits for the children to signal they want more. If a child yells or reaches, she encourages the use of words and signs. Abby reaches her fork to Ms. Lindsey's plate. Ms. Lindsey gently guides it back and says, "You have peas, beans, and chicken. This [indicating the caregiver's plate] is my food." Abby quickly eats her peas and then signs for more. Ms. Lindsey dishes out more peas for Abby. Jack points to the chicken and says "muh" [more]. Ms. Lindsey tells the child that there is no more chicken left but if he is hungry he can have peas or beans.

In the room next door a group of older toddlers is eating lunch with their caregiver, Ms. Irma. Alex

puts a whole piece of bread into his mouth and has difficulty chewing. Ms. Irma sees him doing so and places a small bite in her mouth and chews it without saying anything as Alex watches. Ellen says, "I'm hungry, more chicken." Ms. Irma places another piece on her plate as she verbally tells her what she is doing. She then turns to the child next to her and says, "I see your plate is empty. Alex, are you still hungry?" Alex says, "Yes, hungry, want more peas." Ms. Irma dishes out more peas on Alex's plate as she looks back to Ellen and sees that she has not tasted her beans. She says, "Have you tasted the beans, Ellen?" Ellen looks at her plate and back at the caregiver and says, "Yes, I don't like beans." Ms. Irma takes a bite of her beans and says, "Did you like the peas?" Ellen looks down at her plate again and says, "Yes, more peas." Alex stands up from the table and says, "I'm full." Ms. Irma asks him to wipe his mouth with his washcloth. After he does so she asks him to take his washcloth to the laundry hamper. Alex does so and then washes his hands.

The scenario above shows how teachers can use mealtimes with toddlers to encourage healthy eating behaviors (among other skills). However, mealtimes can often be the most challenging time of the day for caregivers. Toddler mealtimes can turn from exasperating to an enjoyable learning experience when caregivers are equipped with the right tools for each child.

Picky Eating

According to the American Academy of Pediatrics (2012), growth rate slows during the toddler years because children no longer require as much food. The related slowing of food consumption may make the

child seem like a picky eater and the caregiver may be concerned that the child is not getting the adequate amount of energy from calories necessary to thrive. Toddlers do not need as much food as adults as their stomachs are only the size of their clenched fist (Dosman & Andrews, 2012). While picky eating is common due to biologically based reasons, it is also developmentally appropriate in the toddler years as children from one to three are exerting their control. Less control perceived by the child is demonstrated by an increase in picky eating behaviors.



Photo courtesy of the authors

A young toddler (1 year) will utilize both hands and utensils to eat.

Frequent exposure to a variety of foods is important.

Toddlers are less likely to consume fruits and vegetables if they are perceived as picky eaters (Horodynski, Stommel, Brophy-Herb, Yan, & Weatherspoon, 2010). If a toddler does not like a given food there are many things the adult can do to encourage the child to taste it. Frequent exposure to foods is a useful technique in encouraging children to taste food (Dosman & Andrews, 2012). If toddlers are exposed to foods many times, they have more opportunities to taste them. Just because a child will not eat a given food during the first few exposures does not mean that he never will. The Academy of Nutrition and Dietetics states that children may need to be exposed to a food eight to ten times before they taste it (Nicklas & Hayes, 2008).

Language is Key

The way we interact with children has the potential to alter their perception of food. Conversation during meals supports lifelong nutrition habits if incorporated into the mealtime process, even with young children who may not be as verbal (Wiggins, 2004). Behaviors and attitudes also have the potential to support lifelong nutrition habits. Behaviors and attitudes about food are often expressed unconsciously during mealtime interactions. The child is likely to adopt the adult's food bias if the adult demonstrates a negative attitude or behavior towards a food. Likewise, the child may also adopt the adult's positive perceptions about food. The interaction during mealtimes that takes place between the adult and child predicts the child's food behaviors and habits (Akhtar-Danesh, Dehghan, Morrison, & Fonseca, 2011). Both positive and negative interactions have the capability to alter the behaviors of children. A new food presented with positive interaction from a primary caregiver increases the chance

that the child will react favorably to the food (Shutts, Kinzler, & DeJesus, 2012). Negative prompts and comments from an adult have the potential to increase poor eating habits and lead to disruptive behavior from the child (Dosman & Andrews, 2012). The interactions that go on during mealtime are therefore essential as they help teach the child what is and is not acceptable behavior in regards to food.

Internal Cues

Many adults unknowingly override children's internal cues of hunger during mealtime interactions. Internal cues of hunger are biologically based mechanisms that let the body know when it is full and when it is still hungry (Orrell-Valente et al., 2007; Ramsay et al., 2010). Many recent studies have found a trend in adult use of specific language that encourages children to override these messages. Language is an important component to supporting a child's internal cues of hunger. Instead of asking children if they want more, ask them if they're still hungry.

Using food as a reward or rewarding children for eating encourages children to ignore their internal cues (Ramsay et al., 2010). By cueing children to how they feel rather than the quantity of food consumed, adults are supporting children's internal cues of hunger. Sign language is a useful tool to help children express their internal cues of hunger before they have gained the ability to express their cues verbally. The use of signs for *eat*, *more*, and *water* can all be beneficial to help children communicate their internal cues with adults. The American Sign Language Dictionary on-line is a useful tool to find the appropriate signs <http://www.handspeak.com/word/>.

Mealtime Control

Children are more likely to develop healthy behaviors when adults select foods to serve the child and the child controls what to consume (Horodynski & Strommel, 2005). Adult control over food is associated with less consumption of healthy foods by the child and increased negative perception about the food. However, when the child controls the food this seems to lead to increased consumption of healthy foods (Vereecken, Rovner, & Maes, 2010). If the negative perception still exists, the same issue will arise the next time the food is served (Bante, Elliot, Harrod, & Haire-Joshu, 2008; Hughes et al., 2007).

While making a child try just one bite seems like a good idea because it encourages him to consume some of the vegetables that are vital for his development, in the long run it encourages the development of unhealthy eating behaviors because the choice is not theirs. Over time, this leads to less consumption of healthy foods.

The goal of positive nutrition during childhood is to create healthy habits that will last into adulthood rather than just increasing consumption during childhood (Bante et al., 2008; Hughes et al., 2007). Since children during the toddler years are developing self-regulation regarding eating behaviors (Horodynski & Stommel, 2005), caregivers can support self-regulation by:

- Following the toddlers lead to know how much food should go on the plate,



Photos courtesy of the authors

The goal is to create healthy habits that will last into adulthood.

Older toddlers (2 years) can handle utensils and glasses.



Photo courtesy of the authors

Toddler mealtimes should be fun, learning experiences with plenty of opportunities to experience and taste new foods.

- Allowing toddlers to pick the foods they wish to consume off their plate, and
- Following the child's internal cues of hunger.

When toddlers are hungry they feel similar biological processes as adults, such as a growling stomach or irritability. When children are full they may stop eating or refuse to eat anything but a preferable food on their plate and when they are still hungry they may ask for more or point to other food in the area.

Set the Example

Adults that model healthy practices set a good example for children and are more likely to have children in their care that self-regulate their behaviors (Horodyski & Strommel, 2005). This can be done through demonstration and modeling of the behaviors one wishes to see exhibited by the children. Show the children the same behaviors you want to see from them. When you are full, tell the children and stop eating. From birth children follow the social cues

of their caregivers to know what to do in a given situation (Shutts, Kinzler, McKee, & Spelke 2009). Infants choose to eat a food based on the social response of their caregiver and toddlers are more likely to consume fruits and vegetables if their caregiver eats them (Horodyski et al., 2010; Shutts et al., 2009). In the scenario, Alex, places a whole piece of bread in his mouth. The caregiver demonstrates taking small bites, modeling appropriate eating behaviors, as Alex watches.

Cultural and Family Considerations

Interactions with food are determined by cultural and social norms during mealtimes (Ziegler, Hanson, Ponza, Novak, & Hendricks, 2006). Cultural practices in relation to food should be considered when working with children and families. Cultural behaviors in regard to foods may impact children's food preferences (Mennella, Ziegler, Briefel, & Novak, 2006).

One aspect of culture to consider is the availability of food within the

community and individual households. The attainability of foods, both in terms of cost and distance, can create many challenges for some families (Omar, Coleman, & Hoerr, 2001). Food security and insecurity exist in the life of many families in the United States and has the potential to greatly impact the healthy lifestyles of families. Food security is defined as an individual's access, at all times, to nutritious and safe foods that can be obtained in a socially acceptable manner (Cook & Frank, 2008). Food insecurity can be especially detrimental to infants and toddlers because of the rapid growth that occurs during these years (Omar et al., 2001). Children who are unfamiliar with fresh fruits and vegetables (because of lack of access) may not consume them as quickly as children who are accustomed to the food. It is important to respect children's individual differences while still serving them healthy foods. Families have different knowledge levels related to nutrition and feeding practices, and may believe they are feeding their child healthily even when it contradicts the caregiver's beliefs of what constitutes healthy (Omar et al., 2001). Therefore, not only may parental education in healthy eating habits be beneficial, but also connecting families to resources within the community that may support food security.

All Children are Different

All children come into the classroom with differing awareness of their internal hunger cues. Children that have been supported by an environment that encourages them to listen to their internal cues will most likely tell you when they are full, whereas children that have been encouraged by their environment to

ignore their internal cues may quit eating before they are ready, leaving them hungry earlier in the day, or potentially leading them to consume too much food and feel ill (Orrell-Valente et al., 2007; Ramsay et al., 2010). Children that have little control over what foods they eat off of their plate may often demonstrate resistance during mealtimes whereas a child that has selected the foods to consume is likely to demonstrate decreased picky eating behaviors (Orrell-Valente et al., 2007; Ramsay et al., 2010).

Conclusion

The toddler years are critical in terms of the development of healthy eating behaviors as the eating behaviors that children develop at this age have the potential to impact their eating behaviors throughout life. It is the adult's role to choose and encourage healthy food choices and the child's role to decide which foods and how much he wants to eat. Toddlers develop attitudes regarding food during this time period as well. Caregivers have an opportunity to make conscious decisions that promote healthy eating behaviors when interacting with young children.

References

- Akhtar-Danesh, N., Dehghan, M., Morrison, K. M., & Fonseca, S. (2011). Parents' perceptions and attitudes on childhood obesity: A q-methodology study. *Journal of the American Academy of Nurse Practitioners*, 23, 67-75. doi:10.1111/j.1745-7599.2010.00584.x
- American Academy of Pediatrics. (2012). Infant Food and Feeding. Retrieved from <http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/HALF-Implementation-Guide/Age-Specific-Content/Pages/Infant-Food-and-Feeding.aspx>
- American Academy of Pediatrics. (2012). Toddler Food and Feeding. Retrieved from <http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/HALF-Implementation-Guide/Age-Specific-Content/Pages/Toddler-Food-and-Feeding.aspx>
- Bante, H., Elliot, M., Harrod, A., & Haire-Joshu, D. (2008). The use of inappropriate feeding practices by rural parents and their effect on preschoolers' fruit and vegetable preferences and intake. *Journal of Nutrition Education & Behavior*, 40, 28-33. doi: 10.1016/j.jneb.2007.02.00
- Cook, J. T., & Frank, D. A. (2008). Food security, poverty, and human development in the United States. *Annals of the New York Academy of Sciences*, 1136, 193-209. doi: 10.1196/annals.1425.001
- Dosman, C., & Andrews, D. (2012). Anticipatory guidance for cognitive and social-emotional development: birth to five years. *Pediatrics and Child Health*, 17, 75-80. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3299350>
- Horodyski, M. A., & Stommel, M. (2005). Nutrition education aimed at toddlers: An intervention study. *Pediatric Nursing*, 31. Retrieved from <http://0-web.ebscohost.com.library.uark.edu/ehost/pdfviewer/pdfviewer?sid=8bf27495-b849-431d-a67e-fa5a6c784b14%40sessionmgr112&vid=23&hid=108>
- Horodyski, M. A., Stommel, M., Brophy-Herb, H., Yan, X., & Weatherspoon, L. (2010). Low-income African American and non-Hispanic white mothers' self-efficacy, 'picky eater' perception, and toddler fruit and vegetable consumption. *Public Health Nursing*, 27, 408-417. doi: 10.1111/j.1525-1446.2010.00873.x
- Hughes, S. O., Patrick, H., Power, T. G., Fisher, J. O., Anderson, C. B., & Nicklas, T. A. (2007). The impact of child care providers' feeding on children's food consumption. *Journal of Developmental and Behavioral Pediatrics*, 28, 100-107. doi: 10.1097/01.DBP.0000267561.34199.a9
- Mennella, J. A., Ziegler, P., Briefel, R., & Novak, T. (2006). Feeding infants and toddlers study: The types of foods fed to Hispanic infants and toddlers. *Journal of the American Dietetic Association*, 106(1), 96-106. doi: 10.1016/j.jada.2005.09.038
- Nicklas, T. A. & Hayes, D. (2008). Position of the American Dietetic Association: Nutrition guidance for healthy children ages 2 to 11 years. *Journal of the American Dietetic Association*, 108-1047. doi: 10.1016/j.jada.2008.04.005
- Omar, M. A., Coleman, G., & Hoerr, S. (2001). Healthy eating for rural low-income toddlers: Caregivers' perceptions. *Journal of Community Health Nursing*, 18(2), 93-106. doi: 10.1207/S15327655JCHN1802_03
- Orrell-Valente, J. K., Hill, L. G., Brechwald, W. A., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2007). "Just three more bites": An observational analysis of parents' socialization of children's eating at mealtimes. *Appetite*, 48, 37-45. doi: 10.1016/j.appet.2006.06.006
- Ramsay, S. A., Branen, L. J., Fletcher, J., Price, E., Johnson, S. L., & Sigman-Grant, Madeleine. (2010). "Are you done?" Child care provider's verbal communication at mealtimes that reinforce or hinder children's internal cues of hunger and satiation. *Journal of Nutrition Education and Behavior*, 42, 265-270. doi: 10.1016/j.jneb.2009.07.002
- Shutts, K., Kinzler, K. D., McKee, C. B., & Spelke, E. S. (2009). Social information guides infants' selection of foods. *Journal of Cognition and Development*, 10, 1-17. doi: 10.1080/15248370902966636
- Shutts, K., Kinzler, K. D., and DeJesus, J. M. (2012). Understanding infants' and children's social learning about foods: Previous research and new prospects. *Developmental Psychology*, 1-7. doi: 10.1037/a0027551
- Vereecken, C., Rovner, A., and Maes, L. (2010). Associations of parenting styles, parental feeding practices and child characteristics with young children's fruit and vegetable consumption. *Appetite*, 55, 589-596. doi: 10.1016/j.appet.2010.09.009
- Weaver, L. T., More, J. A., and Harris, G. (2008). What foods for toddlers. *British Nutrition Foundation Nutrition Bulletin*, 33, 40-46. doi: 10.1111/j.1467-3010.2007.00667.x
- Wiggins, S. (2004). Good for 'you': Generic and individual healthy eating advice in family mealtimes. *Journal of Health Psychology*, 9, 535-548. doi: 10.1177/1359105304044037
- Ziegler, P., Hanson, C., Ponza, M., Novak, T., & Hendricks, K. (2006). Feeding infants and toddlers study: Meal and snack intakes of Hispanic and Non-Hispanic infants and toddlers. *The American Dietetic Association*, 106, 107-123. doi: 10.1016/j.jada.2005.09.037

About the Authors

Larra Brawley, M.S., is a recent graduate of the University of Arkansas where she obtained her M.S. in Human Development and Family Sciences. She also completed a B.A. in Child Development at CSU, Stanislaus. Her graduate research involved the influence of parents in young children's eating behaviors. She has worked with Infants and Toddlers for 6 years and currently works as a Lead Teacher with Infants at CCLC, Electronic Arts.

Jennifer K. Henk, Ph.D., is Assistant Professor of Human Development & Family Sciences at University of Arkansas. She completed a B.S. in Psychology at Texas A&M University and a M.S. and Ph.D. at University of Missouri-Columbia. She has contributed to several federally funded research projects studying interventions designed to improve child and family outcomes, early childhood education, and early childhood professional development. Her research and teaching interests include exploring child and family outcomes, early childhood education, and early childhood professional development, especially for at-risk populations, and continuing to make connections between research and public policy.