

Baby-Led Weaning: An Approach to Introducing Solid Foods to Infants

EXTENSION
UtahStateUniversity

November 2019

FN/Nutrition/ 2019-05pr

Lydia Bangerter, Dietetics Student; Mateja R. Savoie Roskos PhD, MPH, RD; Casey Coombs MS, RD

Infant feeding can be a challenging and daunting task especially when you consider the impact nutrition has on growth and development at this age. Typically, infants are introduced to pureed foods between 4-6 months of age and are fed by their parents until they are able to use utensils by themselves. New research shows that there may be a different way to help wean babies from milk to solid foods. Baby-Led Weaning (BLW) is a safe and effective alternative to the traditional method as it introduces solid foods in a way that respects an infant's autonomy, provides supplemental nutrition, and promotes healthy weight and eating behaviors (Rapley 2015). In this fact sheet, we will discuss what BLW is and strategies to help parents feed their infant using this approach.



What Is Baby-Led Weaning?

BLW is the process of allowing babies to learn how to feed themselves as they transition from milk/formula to eating solid foods (Rapley & Murkett, 2010). Any foods introduced during this weaning period are often referred to as “complementary foods.” The term Baby-Led Weaning was first coined in the early 2000s, but many parents instinctually follow a baby-led approach when introducing solid foods (Rapley & Murkett, 2010). Spoon feeding became a common practice in the mid 1900s due to the commercialization of pureed infant foods, and the practice continued as many pediatricians recommended that babies start on purees as early as 4 months (Rapley & Murkett, 2010). More current pediatric recommendations, aligning with recent research, indicates that parents should wait until their baby is 6 months of age to introduce complementary foods (American Pediatric Association, 2018; Rapley 2015). Likewise in BLW, solid foods are introduced at 6 months, when many babies are developmentally ready to handle solid foods in the form offered (Brown, Jones, & Rowan, 2017; Naylor & Morrow, 2001). When using the BLW approach, your baby will sit in a high chair at the table with the rest of the family during mealtime (Rapley & Murkett, 2010). Your baby can be offered the same foods as everyone else but with a texture that is modified to be soft enough for his/her developmental age (Rapley, 2018). Encourage your baby to explore his/her food through touch, taste, smell, and play. At first your baby will only consume small amounts of food and that's ok! Breast milk or formula will continue to provide the main source of energy and nutrients in your baby's diet (Rapley & Murkett, 2010). Continue milk feedings throughout the transition phase of weaning, which will typically be between 6-12 months of age (Rapley, 2011; Rapley, 2015).



Why Baby-Led Weaning?



BLW is a logical continuation of baby-led or on demand breastfeeding/formula feeding, when infants are fed according to their own hunger cues (Cameron, Heath, & Taylor, 2012). The BLW approach aligns closely with the Ellyn Satter principles on childhood feeding. In the Ellyn Satter approach, the role of the parent is to decide when and what nutritious food to provide, and the role of the child is to decide what and how much of that food they want to eat (Satter, 2012). Similarly, BLW lets you as a parent decide what foods to present to your baby, and your baby gets to decide which of the foods they want to try (Rapley, 2015). Benefits and supporting research on BLW are discussed in Table 1.

Table 1. Benefits and Research on Baby-Led Weaning

Benefits of BLW	Research
Responsive to hunger and satiety cues	Babies who are in control of their own food intake are better at learning when they are hungry and when they are full, which also leads to healthy eating habits later in life (Satter, 2012).
Improved energy regulation and healthier weight	Babies who self-wean typically weigh less and have a reduced risk of obesity in comparison to their spoon-fed peers (Rapley, 2015; Townsend & Pitchford, 2012).
Chewing and swallowing skills developed	Chewing and swallowing are learned behaviors that develop between 6-12 months of age, whereas purees teach the baby to suck food into their mouths without chewing first (Naylor & Morrow, 2001).
Less fussy eating and picky eaters	Your baby will learn to enjoy a wide variety of tastes and textures, which according to some studies will lead to less fussy and less picky eaters (Fu et al., 2018).
Less stress	Mothers practicing BLW reported lower levels of food restriction, less instances of force feeding, and less concern over child weight (Brown & Lee, 2011).
Enjoyable mealtimes	Family mealtimes have many benefits, and with BLW there is less stress involved for parents in feeding attempts and less stress for babies, too (Brown & Lee, 2011; Rowan & Harris, 2012).
Cheaper than purees	BLW is also less complicated than spoon feeding and is more economically feasible for many families because it does not require expensive jars of pureed food or take time to make homemade purees.

When to Start BLW

Babies should be exclusively breastfed or formula fed until 6 months of age, at which point complementary foods should be introduced (World Health Organization, 2018). For most 6 month old infants, the digestive tract, immune system, and oral motor skills are sufficiently developed to handle solid foods (Naylor & Morrow, 2001). Premature babies or babies with eating difficulties may require more time or alternative approaches to feeding (Rapley, 2015). Consult with your pediatrician if you have questions or concerns about using this technique with your baby.

From the start, your baby will feed himself/herself. They will start with grasping food in their fists, and by nine months of age will be able to pick up food using a pincer grasp with their thumb and forefinger (Rapley & Murkett, 2010). As their motor skills and hand-eye coordination become more developed, your baby will be able to start using utensils (Naylor & Morrow, 2001).



When introducing solid foods, look for signs of readiness. These include the following:

- Baby can sit up unsupported (Rapley, 2015).
- Baby can grasp food in hands and move it to mouth (Rapley, 2015).
- Absence of tongue thrust (Schilling & Peterson, 2017).
- Baby makes attempts at chewing, can move food to back of mouth and swallow.



The gut is developmentally ready to handle food, which will be evident in diaper content. Babies dependent on breastmilk will have yellow poop. As you start to feed your infant solid foods, many of these will pass straight through their gut and be apparent in their poop. Over time, babies that are beginning to digest foods will have a change in their poop, and it will become more brown and solid (Cichero, 2016; Naylor & Morrow, 2001, Rapley).

How to Begin Baby-Led Weaning

Initiate baby-led weaning by letting your baby join the family at meal times. Time these meals to be after milk feedings, so your baby will not be hungry and fussy while exploring new foods (Rapley, 2011; Rapley 2015). Offer your baby new foods to try. Table 2 contains ideas for first foods to introduce to your baby. Cut the food into strips that your baby can hold in their fist with some of the food protruding that he can gnaw on (Rapley & Murkett, 2010). The texture of the food should be easily mashed between your fingers, or your baby's gums, which will help prevent choking. Avoiding large chunks and hard crunchy foods until your baby is a little older can also help prevent choking (Schilling & Peterson, 2017). Also make sure the temperature of the food is either cool or warm, not hot, as babies have sensitive mouths.

Enjoy watching your baby suck, mash, gum, munch, throw, and play with his/her food. A favorite phrase of the BLW community is that, "food is for fun until age one" (Pesch, 2019). Most of your baby's nutritional needs will continue to be met through breast milk or formula during that first year, so focus on providing a wide variety of new foods for your baby to try and explore (Rapley & Murkett, 2010).



Table 2. First Foods to Try and Foods to Avoid

Ideas for complementary foods:	Foods to Avoid:
<ul style="list-style-type: none">● Sticks of soft cooked veggies such as broccoli florets, carrots, or sweet potatoes● Avocado● Soft fruit such as banana, pear, mango● Beans, peas, lentils● Strips of steak● Chunks of fish or tender chicken● scrambled eggs● Cheese or yogurt● Rice● Pasta● Offer sticks of vegetables (soft), fruit, bread, or crackers that can be dipped into a sauce, hummus, or yogurt.	<ul style="list-style-type: none">● Added sugar● Added salt● Saturated fat● Foods that may cause choking, such as whole grapes or cherry tomatoes, or hard foods● Cows milk● Undercooked eggs or meat● Juice● Honey

Rapley & Murkett, 2010; Schilling & Peterson, 2017).

Common Concerns

Choking is the most common concern regarding BLW, as the infants have access to bigger pieces of food. Studies indicate that BLW babies are no more likely to choke than babies who are spoon fed (Faungupo et al., 2016; Pesch, 2019; Rapley 2011). Following safety precautions will also help reduce risk of choking.

How to prevent choking:

- Ensure your baby is always sitting upright during feedings.
- Make sure the food presented is in the proper shape, size, and texture for the baby.
- Cut food into long strips they can grab in their fists.
- Never leave your baby alone with food. (Schilling & Peterson 2017).

It is also important to recognize the difference between choking and gagging. Gagging is a normal and natural response that occurs when there is too much food in a baby's mouth (Rapley 2011). Their gag response is located higher on the tongue than in adults, so babies will gag more often (Fangupo et al., 2016). This may be alarming at first. Gagging will involve spluttering, coughing, and spitting food out. Watch your baby closely to determine if they are simply gagging, and able to move air and food around, or if they are truly choking and there is no passage of air (Rapley, 2011; Fangupo et al., 2016).

Other concerns about BLW include energy and nutrient deficiencies. Some research shows that baby-led weaning can result in a lower overall calorie intake and iron intake in an infants' diets (Pesch, 2019; Townsend & Pitchford, 2012). This can be easily corrected by ensuring the baby is still receiving plenty of milk feedings throughout the weaning process, and by offering high-energy and high-iron complementary foods. (Cameron, Taylor & Heath, 2015; Chichero 2016b; Pesch 2019). Finally, BLW can be very messy. Use bibs, towels, mats, and rags to catch food and help reduce waste (Rapley & Murkett, 2010).



Baby-led weaning is a great approach to introducing solid foods to a baby's diet. BLW promotes autonomy and encourages healthy eating habits that will continue as a child grows. This approach may not be suitable for all children, especially for those with developmental or feeding disorders (Rapley 2011). Consult with your pediatrician before making changes to your child's diet and feeding style. For more information on conventional infant feeding, see, "Healthy Beginnings: Infant and Toddler Feeding" by Chelsea Feller and Carrie Durward. https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=2806&context=extension_curall

References

- American Academy of Pediatrics. Starting solid foods. HealthyChildren.org website. Available at: <https://www.healthychildren.org/English/agesstages/baby/feeding-nutrition/Pages/Switching-To-Solid-Foods.aspx>. Updated January 1, 2018.
- Brown, A., Jones, S. W., & Rowan, H. (2017). Baby-Led Weaning: The Evidence to Date. *Current Nutrition Reports*, 6(2), 148–156. doi.org/10.1007/s13668-017-0201-2
- Brown, A., & Lee, M. (2011). Maternal control of child feeding during the weaning period: Differences between mothers following a baby-led or standard weaning approach. *Maternal and Child Health Journal*, 15(8), 1265–1271. doi.org/10.1007/s10995-010-0678-4
- Cameron, S. L., Heath, A.-L. M., & Taylor, R. W. (2012). How feasible is Baby-Led Weaning as an approach to infant feeding? A review of the evidence. *Nutrients*, 4(11), 1575–1609. doi.org/10.3390/nu4111575
- Cichero, J. A. Y. (2016). Introducing solid foods using baby-led weaning vs. spoon-feeding: A focus on oral development, nutrient intake and quality of research to bring balance to the debate. *Nutrition Bulletin*, 41(1), 72–77. <https://doi.org/10.1111/nbu.12191>
- Fangupo, L. J., Heath, A.-L. M., Williams, S. M., Williams, L. W. E., Morison, B. J., Fleming, E. A., ... Taylor, R. W. (2016). A Baby-Led approach to eating solids and risk of choking. *Pediatrics*, 138(4), e20160772. doi.org/10.1542/peds.2016-0772
- Fu, X., Conlon, C. A., Haszard, J. J., Beck, K. L., von Hurst, P. R., Taylor, R. W., & Heath, A.-L. M. (2018). Food fussiness and early feeding characteristics of infants following Baby-Led Weaning and traditional spoon-feeding in New Zealand: An internet survey. *Appetite*, 130, 110–116. doi.org/10.1016/j.appet.2018.07.033
- Naylor, A. J., & Morrow, A. L. (2001). Reviews of the relevant literature concerning infant immunologic, gastrointestinal, oral motor and maternal reproductive and lactational development. *Linkages*, 44.
- Pesch, D. (2019). Introducing complementary foods in infancy. *Contemporary Pediatrics*, 36(1), 6.
- Rapley, G. (2011). Baby-led weaning: transitioning to solid foods at the baby's own pace. *Community Practitioner*, 84(6), 5.
- Rapley, G. (2015). Baby-led weaning: The theory and evidence behind the approach. *Journal of Health Visiting*, 3(3), 144–151. doi.org/10.12968/johv.2015.3.3.144
- Rapley, G. A. (2018). Baby-led weaning: Where are we now? *Nutrition Bulletin*, 43(3), 262–268. doi.org/10.1111/nbu.12338
- Rapley, G., & Murkett, T. (2010). *Baby-Led Weaning* (2nd ed.). New York, NY: The Experiment.
- Satter, E. (2012). *How to get your kid to eat: But not too much*. Chicago, IL: Bull Publishing Company.
- Schilling, L., & Peterson, W. J. (2017). *Born to eat: whole, healthy foods from baby's first bite*. New York, NY: Skyhorse Publishing.
- World Health Organization. Infant and young child feeding. (2018, February 16). Retrieved May 23, 2019. <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>.

Acknowledgments

SNAP and FDPIR State or local agencies, and their subrecipients, must post the following Nondiscrimination Statement: In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, sex, religious creed, disability, age, political beliefs, or reprisal or retaliation for prior civil rights activity in any program or activity conducted or funded by USDA. Persons with disabilities who require alternative means of communication for program information (e.g. Braille, large print, audiotape, American Sign Language, etc.), should contact the Agency (State or local) where they applied for benefits. Individuals who are deaf, hard of hearing or have speech disabilities may contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English. To file a program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, (AD-3027) found online at:

http://www.ascr.usda.gov/complaint_filing_cust.html, and at any USDA office, or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov. This institution is an equal opportunity provider.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions. Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities. This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Kenneth L. White, Vice President for Extension and Agriculture, Utah State University.