



1

Relevant Disclosures

We'd like to disclose the following financial relationships:

- Paid consultants for The Lactation OT, an online continuing education company.
- Owners of Feeders & Growers, LLC, an online continuing education company.
- Employed full time by Solid Starts, Inc.

The information and views presented today are completely our own.

2

Who we are



Kim Grenawitzke, OTD, OTR/L, SCFES, IBCLC, CNT
Pediatric Occupational Therapist
International Board Certified Lactation Consultant



Kary Rappaport, OTR/L, MS, SCFES, IBCLC
Pediatric Occupational Therapist
International Board Certified Lactation Consultant



solidstarts.com | @solidstarts

3

Objectives

- Describe signs of developmental readiness to start solid food
- Explain safe seating options for solid food and proper high chair fit
- Recall strategies to serve finger foods safely to babies starting solids
- Describe the difference between gagging and choking and how to respond
- Understand allergen introduction recommendations
- Identify foods to avoid when starting solids
- Identify free and low-cost resources available for providers and families



solidstarts.com | @solidstarts

4

Readiness for Starting Solids⁵⁻⁹

- CDC¹, AAP², and WHO³ all recommend exclusive breastfeeding for 6 months.
- Ability to sit with support
- Ability to use the extremities flexibly in sitting while maintaining balance
- Interest in food and eating



5

Should you start solids at 4 months?

4 months



6 months



6

Baby is ready... now what?!

- Safe eating environment
- Baby led weaning how to
- Foods to avoid
- Choking vs gagging
- Allergen introduction



7

Safe Eating Environment

- Making sure baby is positioned well in the high chair.
 - As upright as possible
 - Make the footplate work
 - Make sure baby can reach!
 - Bring them up to the family table (remove the tray)



8

But, you don't need a high chair!



Maya, 6 mo



Blythe, 7 mo



Baby Led Weaning Basics

What is Baby led weaning?

- Baby self-feeds from the beginning—developmentally appropriate!
- Skip “baby foods” but family foods can be pureed too!
- Focus on skill building and texture tolerance.

How does this work?

- Food is big for self-feeding or thick to cling to spoon
- Baby chews with reflexes and protective reflexes keep baby safe as they learn
- Self feeding decreases choking risk!



Facilitating self-feeding

9 mo, oatmeal



Ripley

6 mo, watermelon



Kalani

7 mo, carrot



Cooper



@SolidStarts | #FingerFoodFirst | solidstarts.com

1

11

Baby Led Weaning: How does it work

- Tongue thrust reflex (pattern)
- Small oral cavity & tightly packed structures
- Gag reflex placement
- Elevated larynx
- Strong swallow response
- Cough response



solidstarts.com | @solidstarts

12

Baby Led Weaning: How does it work

- Large pieces of food provide tons of tactile and proprioceptive input to the oral cavity.
- Reflexive chewing
- Reflexive airway protection
- **Self feeding decreases choking risk!**



13

7 mo, pear pieces



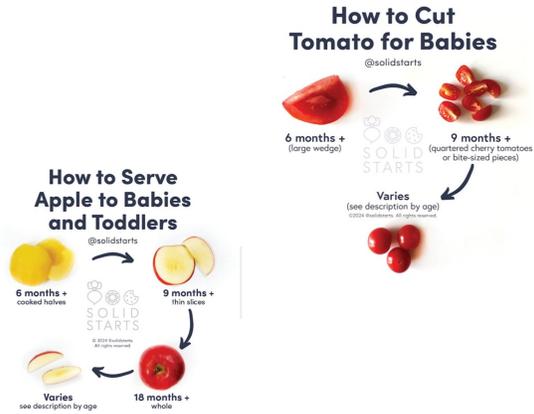
7 mo, pear spear



14

Preparing food safely for baby

- Make sure baby can pick the food up—size and shape matter
- Food should be soft enough for baby to mash with the gums, or, resistive to work on chewing skills.
- Minimize choking risk by modifying foods.



15

Preparing food safely for baby



16

Foods to avoid

- Foods to avoid
 - Foods that would make baby sick
 - Choking hazards with minimal nutritional value
- Food to modify
 - Small
 - Round or tapered
 - Firm or compressible
 - Slippery



17

Reflexes keep baby safe



18

Gagging helps baby learn



19

Choking, gagging, and everything in between

Gagging vs. Choking
@solidstarts



**Retching, coughing, or crying:
let baby keep trying.**



**Panicked, silent, or wheezing:
baby's not breathing.**

- True choking is quite rare (despite what the media wants you to believe!)²⁰
- Gagging is common and normal, but can look uncomfortable
- Coughing ≠ Choking



20

Allergen Introduction



Charles, 8 mo

- 9 common allergens
- AAAAI recommends infants are introduced to common allergens before the first birthday.²¹
- Main focus on egg, peanut, and dairy
- Introduce one at a time, and continue for three consecutive exposures



21

Allergen introduction

- Emerging evidence to support introducing at 4 mo for babies who are high risk.²²
- Risk factors:
 - Severe eczema
 - Pre-existing food allergy
- Parent/sibling with allergies?



22

Allergic Reactions



Symptoms of mild allergic reactions:

- Includes ONE of the following
 - Itchy or runny nose, sneezing
 - Itchy mouth
 - A few isolated hives, mild itching
 - Mild nausea or GI discomfort, or a single episode of vomiting

Symptoms of severe allergic reactions

- Includes any of the following, either alone or in combination:
 - Shortness of breath, wheezing, cough
 - Pale, ashen or bluish skin
 - Swelling of face, lips, or tongue
 - Widespread hives on body
 - Repetitive vomiting or diarrhea
 - Sudden tiredness/lethargy/seeming limp



solidstarts.com | @solidstarts

23

Feeding Schedules

- Focus is on learning at first—breastmilk and formula support nutrition
 - For the first couple of months, offer solids one time per day
 - Don't bring baby to the table hungry!
- Around 8-9 months, work towards offering solids two times per day
- Goal: 3 meals a day by 11-12 months
- This timeline is flexible...



solidstarts.com | @solidstarts

24

Resources

The collage features several key resources:

- Books:**
 - "Baby-Led Weaning: The Essential Guide to Introducing Solid Food and Helping Your Baby to Grow a Happy and Confident Eater" by Gill Rapley and Tracy Murkett.
 - "SOLID STARTS FOR BABIES: How to Introduce Solid Food and Raise a Happy Eater".
- Social Media:** A grid of 12 Instagram posts from @solidstarts, covering topics like meal ideas, bottle feeding, and choking.
- Website:** A screenshot of the solidstarts.com website with the headline "Raise a Happy, Healthy Eater".
- Mobile App:** Three screenshots of the Solid Starts app showing meal ideas and educational content.

solidstarts.com | @solidstarts

25

SOLID STARTS

Questions? Thank you!

kim@solidstarts.com
kary@solidstarts.com

A baby is shown smiling and holding a red tomato.

26

References

1. When, What, and How to Introduce Solid Foods [Internet]. CDC Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion; 2023. Available from: <https://www.cdc.gov/nutrition/infantandtoddlernutrition/foods-and-drinks/when-to-introduce-solid-foods.html>
2. WHO Guideline for complementary feeding of infants and young children 6–23 months of age [Internet]. Geneva: World Health Organization; 2023. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK596427/>
3. Meek, J. Y., & Noble, L. (2022). Policy Statement: Breastfeeding and the Use of Human Milk. *Pediatrics*, 150(1). <https://doi.org/10.1542/peds.2022-057988>
4. Rippey, P. L., Aravena, F., & Nyongator, J. P. (2020). Health impacts of early complementary food introduction between formula-fed and breastfed infants. *Journal of pediatric gastroenterology and nutrition*, 70(3), 375–380.
5. Lanigan, J., Bishop, J., Kimber, A. et al. (2001). Systematic review concerning the age of introduction of complementary foods to the healthy full-term infant. *Eur J Clin Nutr* 55, 309–320. <https://doi.org/10.1038/sj.eicn.1601168>
6. Jonsdottir OH, et al. (2012). Timing of the introduction of complementary foods in infancy: a randomized controlled trial. *Pediatrics*;130(6):1038–45. doi: 10.1542/peds.2011-3838. Epub 2012 Nov 12. PMID: 23147979.
7. Young, B.E., Krebs, N.F. (2013) Complementary Feeding: Critical Considerations to Optimize Growth, Nutrition, and Feeding Behavior. *Curr Pediatr Rep* 1, 247–256. <https://doi.org/10.1007/s40124-013-0030-8>
8. Finnane, J.M., et al (2017). Mealtime Structure and Responsive Feeding Practices Are Associated With Less Food Fussiness and More Food Enjoyment in Children. *Journal of Nutrition Education and Behavior*, 49(1), pp 11–18, <https://doi.org/10.1016/j.jneb.2016.08.007>.
9. Hoskens, J., Klingels, K., & Smits-Engelsman, B. (2018). Validity and cross-cultural differences of the Bayley Scales of Infant and Toddler Development, in typically developing infants. *Early Human Development*, 125, 17–25.
10. Saitoh, E., Shibata, S., Matsuo, K., Baba, M., Fujii, W., & Palmer, J. B. (2007). Chewing and food consistency: effects on bolus transport and swallow initiation. *Dysphagia*, 22(2), 100–107. <https://doi.org/10.1007/s00455-006-9060-5>
11. Ertekin, Ç., et al. (2001). The effect of head and neck positions on oropharyngeal swallowing: A clinical and electrophysiologic study. *Archives of Physical Medicine and Rehabilitation*, 82(9), 1255–1260.



solidstarts.com | @solidstarts

27

References

12. Sakaguchi, K., et al (2023). Effect of sitting posture with and without sole-ground contact on chewing stability and masticatory performance. *Journal of Oral Science*, 65(4), 251–256.
13. Uesugi, Y., et al. (2019). Sole-ground contact and sitting leg position influence suprahyoid and sternocleidomastoid muscle activity during swallowing of liquids. *Clinical and Experimental Dental Research*, 5(5), 505–512.
14. Spill, M. K., et al. (2019). Caregiver feeding practices and child weight outcomes: a systematic review. *The American journal of clinical nutrition*, 109, 990S–1002S.
15. Finnane, J.M., et al (2017). Mealtime Structure and Responsive Feeding Practices Are Associated With Less Food Fussiness and More Food Enjoyment in Children. *Journal of Nutrition Education and Behavior*, 49(1), pp 11–18, <https://doi.org/10.1016/j.jneb.2016.08.007>.
16. Shloim, N., Vereijken, C. M. J. L., Blundell, P., & Hetherington, M. M. (2017). Looking for cues—infant communication of hunger and satiation during milk feeding. *Appetite*, 108, 74–82.
17. <https://www.cdc.gov/botulism/prevention/index.html>
18. Fangupo LJ, Heath AM, Williams SM, et al. A Baby-Led Approach to Eating Solids and Risk of Choking. *Pediatrics*. 2016;138(4):e20160772. doi:10.1542/peds.2016-0772
19. <https://www.healthychildren.org/English/ages-stages/baby/feeding-nutrition/Pages/Starting-Solid-Foods.aspx> last updated 8/12/22; last accessed on 7/29/23.
20. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999–2020 on CDC WONDER Online Database, released in 2021. Data are from the Multiple Cause of Death Files, 1999–2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Mar 6, 2022 3:55:54 PM.
21. Fleischer, D., Spergel, J., Assa'ad, A.H., Pongracic, J. (2012). Primary prevention of allergic disease through nutritional interventions. *The Journal of Allergy and Clinical Immunology: In Practice*, 1(1). Retrieved February 25, 2021.
22. Turner, P. J., Campbell, D. E., Boyle, R. J., Levin, M. E. (2018). Primary Prevention of Food Allergy: Translating Evidence from Clinical Trials to Population-Based Recommendations. *The journal of allergy and clinical immunology. In practice*, 6(2), 367–375.



solidstarts.com | @solidstarts

28

Other baby led weaning literature

- Martínón-Torres N, Carreira N, Picáns-Leis R, Pérez-Ferreirós A, Kalén A, Leis R. Baby-Led Weaning: What Role Does It Play in Obesity Risk during the First Years? A Systematic Review. *Nutrients*. 2021;13(3):1009. Published 2021 Mar 21. doi:10.3390/nu13031009
- Morison B et al. "How Different Are Baby-Led Weaning and Conventional Complementary Feeding? A Cross-Sectional Study of Infants Aged 6-8 Months." *BMJ Open* 6, no. 5 (06 2016): e010665. <https://doi.org/10.1136/bmjopen-2015-010665>.
- Erickson L et al. "Impact of a modified version of baby-led weaning on infant food and nutrient intakes: The BLISS randomized controlled trial." *Nutrients*. 2018;10:740. doi: 10.3390/nu10060740.
- Cameron SL, Heath AL, Taylor RW. Healthcare professionals' and mothers' knowledge of, attitudes to and experiences with, Baby-Led Weaning: a content analysis study. *BMJ Open*. 2012;2(6):e001542. Published 2012 Nov 26. doi:10.1136/bmjopen-2012-001542
- Amy Bentley. *Inventing Baby Food: Taste, Health, and the Industrialization of the American Diet*. University of California Press; 2014. Accessed August 9, 2023.
- Fernández-Medina, I.M., Márquez-Díaz, R.R., Arcas-Rueda, M. *et al*. Experiences and opinions towards baby-led weaning by healthcare professionals. A qualitative study. *Pediatr Res* (2023). <https://doi-org.laneproxy.stanford.edu/10.1038/s41390-023-02694-z>



solidstarts.com | @solidstarts

29

- Arantes A et al. "The baby led weaning method (BLW) in the context of complementary feeding: a review." *Revista Paulista de Pediatria* 36, no. 3 (2018): 353-63. <https://doi.org/10.1590/1984-0462/2018;36;3;00001>.
- Morison B et al.. "Impact of a Modified Version of Baby-Led Weaning on Dietary Variety and Food Preferences in Infants." *Nutrients* 10, no. 8 (August 15, 2018). <https://doi.org/10.3390/nu10081092>.
- Daniels L et al. "Impact of a Modified Version of Baby-Led Weaning on Iron Intake and Status: A Randomised Controlled Trial." *BMJ Open* 8, no. 6 (June 27, 2018): e019036. <https://doi.org/10.1136/bmjopen-2017-019036>.
- Williams Erickson L, Taylor RW, Haszard JJ, et al. Impact of a Modified Version of Baby-Led Weaning on Infant Food and Nutrient Intakes: The BLISS Randomized Controlled Trial. *Nutrients*. 2018;10(6):740. Published 2018 Jun 7. doi:10.3390/nu10060740
- Taylor R et al. "Effect of a Baby-Led Approach to Complementary Feeding on Infant Growth and Overweight: A Randomized Clinical Trial." *JAMA Pediatrics* 171, no. 9 (September 1, 2017): 838-46. <https://doi.org/10.1001/jamapediatrics.2017.1284>.



solidstarts.com | @solidstarts

30