

At the Grown-Ups Table: An Introduction to Baby-Led Weaning

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Although we may never know their exact methods, we can be pretty sure that however our ancestors fed their babies, it didn't involve making purees with blenders and food processors. So perhaps it's no coincidence that as ancestral eating rises in popularity, a more primitive method of infant feeding is becoming increasingly popular, too.

Called baby-led weaning (BLW), this method encourages parents to place safely-modified versions of their own table food in front of their babies and allow the infants to self-feed, starting as early as six-months-old. And while families have likely been using the principles of BLW for eons, the method has especially caught on over the last 10 years due in large part to the publication of the 2008 book *Baby-Led Weaning*, by British authors Gill Rapley and Tracey Murkett.

Parents appreciate the feeding method's focus on nutrient-dense, whole foods and the convenience of not having to prepare special food for their babies, but the infants likely benefit, too. Early research shows that BLW may help children better self-regulate their food intakes and avoid picky eating¹. Besides, no matter how old you are, doesn't a tray full of meat, fish and roasted vegetables sound more appealing than a spoonful of green mush?

"Parents are eager to provide high-quality foods for their infants," says Leslie Schilling, MA, RDN, CSSD, CSCS, coauthor of a book on baby-led weaning called *Born to Eat: Whole, Healthy Foods from Baby's First Bite*. "It's a logical and economical choice for many parents."

These days you'll find dozens of BLW books on Amazon, thousands of BLW recipes and meal ideas on Pinterest and many spirited discussions in Facebook groups that focus on everything from general infant self-feeding to BLW for plant-based and Paleo-specific dietary patterns.

Yet some people, including many medical professionals, gasp at the prospect of letting infants self-feed. What if they don't eat enough? And won't they choke if offered solid foods? But as BLW rises in popularity, the research demonstrating that this method is both safe and effective continues to grow as well. The largest study on infant self-feeding to date, a 2016 randomized study called "The Baby-Led Introduction to SolidS (BLISS)" trial found that compared to their puree-fed counterparts, infants following a modified version of BLW consumed a similar amount of calories and were no more likely to exhibit slow weight gain².

The study, which was specifically designed to address the concerns of medical professionals, also found no significant differences in the number of choking episodes between the self-feeding and puree-fed groups³. A 2018 study out of Swansea University in the U.K. confirmed the BLISS trial's findings and even discovered that among babies who did experience choking episodes, those who were offered finger foods and lumpy purees the least often – that is,

traditionally weaned babies – were likely to have the *most* choking episodes involving these foods, perhaps due to lack of practice with them⁴.

So if you're sold on using BLW with your baby, is it as simple as sliding a few slices of steak from your own plate over to your baby's high chair? Almost. Parents need to be informed of important BLW safety practices and should certainly be trained in infant CPR. Before beginning BLW, babies must be exhibiting signs of readiness, including sitting up straight in a high chair, mouthing toys and showing interest in their parents' food. These signs typically develop around the six-month mark, which is also the age at which the World Health Organization and the American Academy of Pediatrics recommend introducing complimentary foods.

The infant's ability to sit up straight is especially important in regards to gagging, which is a normal and expected part of BLW. As babies first learn to maneuver pieces of solid food, they are likely to trigger their gag reflexes when a too-large piece makes its way towards the back of their mouths. Gagging while leaning forward to spit out the offending morsel helps the baby protect his or herself against choking. Experiencing this process several times should ultimately assist the baby in learning to safely chew and swallow.

Many primal foods are excellent choices for babies. Meat and fish are not only delicious and easy for a baby to enjoy, but provide critical nutrients for their growing bodies, especially iron. Almost unbelievably, babies between seven and twelve months old require more iron than an adult male at 11 mg per day. So offer foods like red meat, poultry, fish and liver as often as possible.

Beef is a particularly great food for babies. "The iron and zinc found in beef are highly bioavailable forms that are crucial an infant's growth and development," says Schilling, whose book *Born to Eat* features juicy piece of steak on the back cover. "I recommend a rib eye or flatiron steak that the whole family can enjoy."

"If baby just gums or sucks on the beefy juices, that's just fine," continues Schilling's *Born to Eat* co-author Wendy Jo Peterson, MS, RDN. "The research we have read shows iron is in the steak juices, so don't fear if your baby only sucks on a piece of steak at first."

"Using ground beef is also a great option," says Schilling. "Roll or press the ground beef into finger-shaped rolls and grill or pan fry. This was a favorite for both [Peterson's] and my girls."

Other nutritious and appropriate foods to serve up are roasted or steamed vegetables including potatoes, broccoli, cauliflower, zucchini and eggplant and fruits like kiwi, soft melon and papaya. Many of these offerings are excellent sources of vitamin C, which boosts iron absorption, so offering meatballs in tomato sauce or citrus-marinated steak is not only delicious, but also smart nutrition.

Although most produce and meats are good choices for babies beginning BLW, parents should be cautioned to prepare and serve them properly. Besides gumming a large piece of steak,

stewed and ground meats will likely be easiest for babies to bite and swallow. Because of food safety concerns, steaks and roasts should be cooked until at least 145°F (medium) and ground meat should be 165°F or above. Fruits and vegetables should always pass the “squish test,” meaning that an adult could easily squish the item between two fingers. So while a slice of ripe peach is the perfect texture, a raw apple slice poses a choking risk. To be made safe, foods like apples can either be cooked or sliced very thinly like a chip, so that they fall apart in the infant’s mouth.

Smaller fruits, like halved blueberries and quartered grapes may be better saved for around the 10-month mark, when the baby’s thumb and forefinger dexterity, known as the pincer grasp, has developed. In general, fruits, vegetables and meat should be offered in long, stick-like slices so that the baby can grasp the pieces with his or her whole hand before the pincer grasp develops. Whole nuts and seeds are choking hazards until after the toddler stage, but these foods can be safely offered as thinly spread butters.

Avocado, of course, is not only the perfect texture for babies beginning BLW, but also an excellent source of much-needed nutrients like omega-3 fats, folate and potassium. Babies may find avocado slices too slippery to pick up at first, though, so try rolling them in almond or flax meal to give them a little more grip and an even greater nutritional boost.

If you’re whipping up guacamole, your baby can certainly enjoy some too, but be prepared for quite a mess! Although it’s a common myth that babies following BLW should not be offered purees or mashed foods, they’re simply another texture and research hasn’t shown any danger in offering them. Make sure your guac is free from small chunks such as diced onions and offer it on a pre-loaded spoon. Other purees your infant may enjoy are mashed potatoes, baba ghanoush and applesauce.

A word of caution on salting that guac, however. Infants’ sodium needs are much lower than those of adults and too much salt has the potential to strain their tiny kidneys. Most BLW resources recommend not salting the infant’s food at all until after 12 months old. But if you’re following a whole foods diet free from, say, cheese crackers and breaded chicken nuggets, it may not be a major issue, says Schilling. “It’s when you start adding lots of convenience foods that salt becomes too much for little ones.”

Certainly don’t steer clear of other flavorings when preparing food for your baby. There’s no reason infants can’t enjoy strong flavors, including all types of herbs, spices and marinades. Indeed, research has shown that infants often prefer the strong flavors they’ve been exposed to via their mothers’ diets, both in utero and through breast milk⁵. Starting babies on these foods now will also help them appreciate such flavors in toddlerhood and beyond, which may reduce picky eating and certainly helps parents avoid the stress of preparing two meals. So serve up some vegetables roasted with fresh minced garlic or a stew seasoned with sweet curry powder – it will be both familiar to your infant and a wonderful learning experience.

Paleo parents should also pay special attention to their infants' carbohydrate intakes. While steak, fish, avocados and lean vegetables provide critical micronutrients and healthy fats, they do not provide the carbohydrates babies need for cognition and growth. Infants' rapidly developing brains actually require twice as much glucose as adult brains. Sufficient carbohydrate intake also allows for the protein in the baby's diet to be efficiently used for critical tissue growth. Babies between the ages of seven and twelve months need at least 95 grams of carbohydrate a day and this number jumps to 130 grams at minimum after age one. Some of this intake will come from breast milk or formula, but parents should prioritize regularly offering carbohydrate sources like potatoes, beets, winter squash and fruits including pineapple, pears and bananas if only Paleo foods are available at home.

Another issue parents following a Paleo eating pattern may run into when feeding infants is allergen introduction. Not too long ago, parents were advised to avoid feeding the top allergenic foods, which include peanuts, tree nuts, eggs, dairy, wheat, soy, fish and shellfish until the child was one or older, but the medical community has recently done a full 180 on this advice. A landmark 2015 study called Learning Early About Peanut Allergy (LEAP) showed that early introduction of peanuts – at as young as four or six months – was likely to reduce the incidence of peanut allergies by as much as 80 percent in high-risk children⁶, prompting major changes in the recommendations on how and when all top allergens are introduced.

“New pediatric guidelines recommend that infants be exposed to all foods that could be potential allergens as soon as developmentally appropriate,” says Schilling. Generally, babies are ready for the top allergens around six or seven months old, although in certain high-risk cases, pediatricians may recommend starting even sooner.

Yet about half of the list of highly allergenic foods – wheat, soy, peanuts and dairy – are not items likely to be found in a Paleo home, so parents will need to make a decision about offering these allergens. Best practice dictates that such foods not only be introduced at an early age, but repeatedly throughout infancy and childhood to help children maintain their tolerances for these foods. Whether or not the child chooses to consume these foods as an adult, accidental cross-contamination is a major and potentially deadly concern for those who do have serious allergies.

“When people postponed these food introductions, we saw the fall out with extreme allergies on the rise,” says Peterson. “From a safety point, it is important.”

One piece of common infant feeding advice you certainly can ignore is to start solids with iron-fortified, grain-based infant cereal. Iron is readily available from the meat, fish and egg yolks you'll be offering your infant, and as the demonstrated safety of infant self-feeding illustrates, there's no need for spoon-feeding anyway. By allowing your infant to explore the smells, textures and rich flavors of adult table foods through BLW, you'll be helping him or her develop a taste for foods other than that bland mush and grow up to be a confident, adventurous eater.

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¹ D’Auria E. et al. Baby-led weaning: what a systematic review of the literature adds on. *Italian Journal of Pediatrics*. 2018Mar;44(1).

² 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).

³ Fangupo LJ, Heath AM, Williams SM, et al. A baby-led approach to eating solids and risk of choking. *Pediatrics*. 2016; 138(4).

⁴ Brown A. No difference in self-reported frequency of choking between infants introduced to solid foods using a baby-led weaning or traditional spoon-feeding approach. *J Hum Nutr Diet*. 2018; 31(4):496-504.

⁵ Beauchamp GK and Mennella JA. Flavor Perception in Human Infants: Development and Functional Significance. *Digestion*. 2011; 83(Suppl 1): 1–6.

⁶ Du Toit G, Roberts G, Sayre PH, Bahnson HT, Radulovic S, Santos AF, et al. Randomized Trial of Peanut Consumption in Infants at Risk for Peanut Allergy. *N Engl J Med*. 2015;372(9):803–813.