



Baby-Led Weaning A New Frontier?

Gill Rapley, Msc, Renata Forste, PhD, Sonya Cameron, PhD, Amy Brown, PhD, and Charlotte Wright, MD

Baby- or infant-led weaning has been described in a variety of ways. Based on your area of practice and discipline, please write your definition of baby-led weaning. Please discuss what you feel is the most common misconception about baby-led weaning.

Rapley: Baby-led weaning (BLW) is an approach to introducing solid food that is based on the infant's developmental readiness to ingest foods other than breast milk or formula. It allows the infant to decide when to begin eating other foods, what to eat (from a selection of healthy foods), how quickly to eat, and how much to consume at a sitting. It also allows him to control the pace at which he expands his diet and relinquishes milk feeds. It is a continuation of the self-feeding and control that characterises effective breastfeeding.^{1,2} Correctly defined and implemented, BLW involves the inclusion of the infant in family mealtimes, where food that is suitable for the infant to eat is made available to all.

Probably the most common misconception about baby-led weaning worldwide is that it refers to weaning the baby off the breast, since this is how the

word "weaning" is understood in many countries. In contrast, in the United Kingdom, "weaning" is generally used to mean the introduction of solid food—to both breastfed and formula-fed babies. A pragmatic definition of weaning is that it refers to the period during which the infant is moving from full reliance on breast milk or formula to the complete cessation of those feeds. Under this definition, weaning begins with the first mouthful of solid food and ends with the last feed of either breast milk or formula. The whole of this process can be baby-led.

In the United Kingdom—and possibly elsewhere—the most common misconception is that BLW is simply the practice of offering infants finger foods alongside puréed or mashed food. This misses the fundamental essence of BLW, which is that the infant chooses and controls his total intake.

Forste: As an academic that has studied the importance of breastfeeding to child health and development, I would describe weaning as the practice of giving infants supplemental foods. In the United States, weaning generally refers to the cessation of breastfeeding; however, I think this creates confusion for women in terms of best practices for infant and child health. As noted by the American

Baby-led weaning has entered the public consciousness. Parents are asking for guidance about "What is baby-led weaning" and more important, how to do it? In this issue of *ICAN*, we created an international panel of experts who have collectively published more than 10 peer-reviewed articles on the topic of Baby-Led Weaning. This is only the first part of a discussion that challenges us as health professionals. Our participants are **Gill Rapley, Renate Forste, Sonya Cameron, Amy Brown, and Charlotte Wright**. Full bios for each of the contributors can be found at the end of this article.

Academy of Pediatrics¹ (2012), the recommendation is that infants breastfeed exclusively to about 6 months of age, and then continue breastfeeding with the supplementation of solid foods to about 1 year of age. Thus, BLW should include breastfeeding exclusively to 6 months. At about 6 months, when the infant can begin to feed himself or herself, then supplemental foods should be given in addition to breast milk. Breastfeeding can then cease based on the child and needs of the mother by the first year.

Cameron: Baby-led weaning (BLW) describes the parent-child interaction during the weaning phase, where the child leads the way with the weaning process. Gill Rapley was first to coin the term "baby-led weaning" when she observed children were able to feed themselves when starting solids at the older age of 6 months, compared with

DOI: 10.1177/1941406415575931.

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the previous recommendation of 4 months. With BLW, the weaning process begins when the child shows interest by reaching out and grabbing pieces of food. Generally with BLW, the infant is offered pieces of whole food in a size and shape that they can pick up and feed themselves, typically those that are “stick-shaped.” The parent decides what food to offer but it is the child who decides what to eat (of the choices provided), how much to eat and how quickly. BLW also differs from conventional methods for introducing complementary food in that a wider range of foods (family foods) are suggested as first foods, including: fruit, vegetables, meat, cheese, well-cooked eggs, bread (or toast), pasta, and most fish.

Brown and colleagues from the United Kingdom^{1,2} have attempted to use a more distinct definition to discriminate between those following a baby-led approach and those using more conventional feeding, by asking parents to estimate the proportion of food that is provided as purées or spoon-fed. It is not clear whether a “true” baby-led approach includes limited use of purées and spoon-feeding (less than 10%) as defined by Brown and Lee or a more strict definition where only finger foods are provided. However, popular websites dedicated to infant feeding, and work from our own group³ would suggest that both views exist among parents who believe themselves to be following a baby-led style of infant feeding.

I think the most common misconception with BLW is that it is an easier way to introduce solid foods, you simply place the food in front of the baby and leave them to it. Although parents have reported that BLW is a more convenient way to introduce solids, compared with the conventional spoon-feeding, it does not mean that the child is just offered any food and left to their own devices. As with the conventional method of feeding, children following BLW must be offered safe, healthy, appropriate foods. They should also share their mealtimes with others for the social interaction and the opportunity

to learn about food. Safety is also a factor in the unlikely event that the child may choke and need assistance.

Brown: How this guidance has been interpreted is an interesting social phenomenon in itself. Some new parents interpret the method very strictly; to be allowed to say that one is following a baby-led method one must never use a spoon or allow an infant to consume pureed food. Otherwise one is simply following a traditional weaning approach including finger foods. Others are more varied, predominantly giving the infant finger foods but sometimes offering a puree. Considerable debate can be seen on internet forum boards and social media groups between these 2 groups.

Does giving occasional purees if you are adopting a baby-led approach matter? I doubt it. In my own research in order to define baby-led weaning, mothers were asked how frequently they gave their baby pureed foods and used spoons. Mothers were classed as being baby-led if they used spoons and purees 10% of the time or less to allow for a realistic approach of sometimes giving the baby a puree when out of the home or spoon-feeding a baby a yoghurt, for example. Outcomes for those who offer a spoon or puree 10% or less of the time, or never, appear to be no different.

Besides which I do not necessarily think the most successful element of the baby-led approach is to do with the elements of self-feeding or whole foods. Yes these things are important but actually I think the “baby-led” element is the most important. Responsive feeding—letting the baby eat at their own pace and only when they are hungry—is a core element of the World Health Organisation guide for the complementary feeding of infants. In older children, parents who are responsive in their feeding style, allowing the child to have some control over what they eat and stopping eating when they are full, tend to have children who eat a better diet in terms of nutrient intake and are more likely to be a healthy weight. I think the same elements apply to the baby-led

method—allowing your baby to be in control of his or her own food choices and appetite is the most important element of any feeding approach and the baby-led method naturally encourages this.

Wright: My understanding of the principle of baby-led weaning is that the infant is provided with suitable foods within reach and left to self-feed. In particular there is no spoon feeding by the parent or offers of other foods to the mouth.

I'm not aware of any significant misconceptions about baby-led weaning.

What is the best evidence to support the practice of baby-led weaning? What type of research would you like to see in the future? Please describe what you feel are barriers to baby-led weaning, in your country or geographical region.

Rapley: The best evidence to support BLW is a combination of research from a variety of fields. The normal infant's need for foods other than milk, his ability to digest them, to chew, and to pick pieces up and take them to his mouth have all been shown to converge at around 6 months,^{3,6} indicating that developmental readiness for solid foods coincides with readiness for self-feeding. In addition, BLW is widely recognised as something that has been practised in many families for years, albeit without a name, with no indication that it is harmful.^{5,7,8}

There is a growing body of anecdotal evidence that BLW may allow infants to protect themselves from foods that might otherwise trigger allergic-type reactions. There are also anecdotal reports that suggest that the experience of BLW may reduce the tendency of older infants and toddlers to put non-food items such as pebbles and marbles into their mouth. Future research could usefully centre on these areas, as well as on the ability of individual infants to choose an adequate, balanced diet for themselves, provided

suitable foods are made available. The potential contribution of BLW to the prevention of picky eating and the promotion of manual dexterity also warrants investigation.

The main barriers to BLW in the United Kingdom would seem to be a lingering scepticism amongst health professionals about its feasibility, along with a persistent body of resistance to 6 months as the minimum recommended age for the introduction of solid foods. It is likely that both of these are fuelled by pressure from the baby food industry, which in turn is supported by the fact that the promotion of commercial weaning foods for use from 4 months is still allowed under UK law.

Forste: There is a substantial literature documenting the health benefits of breastfeeding, especially exclusive breastfeeding to 6 months.¹ For the first 6 months of life, breast milk provides the best nutrition for infants, as well as antibodies that help fight against disease. By 6 months of age, children need more calories than what breast milk can provide, so introducing solid foods into the child's diet is important. Both breastfeeding and weaning require the mother to pay attention to cues from the infant in terms of feeding. In particular, it is important for the infant to learn to self-regulate and identify when full; mothers need to pay attention to those cues and allow infants to guide their feeding. Pushing an infant or child to eat or finish foods beyond satiation can lead to child obesity. Breastfeeding allows the mother to follow the infant's cues in terms of being full, rather than attempting to get the infant to finish a bottle. There are many barriers to baby-led weaning, and baby-led feeding in general in the United States. Bottle-feeding encourages caregivers to control the feeding process, rather than paying attention to infant cues as to when the infant is full. In addition, there are many institutional barriers to breastfeeding generally in the United States. I would certainly like to see more research on infant-led feeding practices and their benefits to child health—particularly obesity.

Cameron: Despite considerable interest in BLW from parents and health workers worldwide, very little research has examined this style of infant feeding. What we do know is that parents who follow a BLW philosophy may be different: BLW mothers are more likely to breastfeed, have more years of education, and are less likely to return to work before 12 months postpartum than other mothers. Interestingly, parents report choosing BLW because they perceive that it provides a range of potential benefits, including being a healthier, less expensive way of introducing solids, and that babies seem to enjoy it.

There are still many unanswered questions, including

1. Is BLW a viable approach for obesity prevention, through improved self-regulation of energy intake?
2. Is the nutrient intake different for children who follow BLW compared to the conventional method?
3. Is choking a real concern for those following a BLW approach?
4. Do infants who follow BLW get enough iron (if they aren't being spoon-fed an iron-fortified cereal), if so, from what sources?

A study is currently underway here at the University of Otago to address the many questions around BLW. The BLISS study, co-led by Associate Prof Rachael Taylor and Dr Anne-Louise Heath, is a randomized controlled trial which aims to assess the efficacy and acceptability of a modified version of baby-led weaning that has been altered to address potential concerns with iron status, choking and growth faltering (Protocol paper will soon be available: "Daniels et al.: Baby-Led Introduction to SolidS (BLISS) study: a randomized controlled trial of a baby-led approach to complementary feeding").

In our New Zealand survey³ of infant feeding, we found that the key barriers to trying BLW were related to concerns about choking and low energy intake. Parents believed that their child would not be able to self-feed safely and they

felt that spoon-feeding purees was safer. Parents who have chosen not to do BLW also often view it as too messy, or too expensive because of the food wastage.

Brown: At present there is not a significant level of empirical large-scale research on the baby-led approach but that is predominantly due to the approach as a recent method not becoming well known until around eight years ago. Research naturally takes time to follow. However anecdotally the method certainly has a successful following. A Google search of "baby-led weaning" returns over 1.3 million hits. Gill Rapley who has published the baby-led weaning book series reports findings from a number of small-scale studies and observations she herself conducted as a student and health visitor.

At that time, 6 years ago, no empirical published study had however examined the area. This led to myself and Dr Michelle Lee collecting the first data specifically exploring the baby-led method and comparing it with a traditional spoon-feeding weaning approach. In the first level of our study when the babies were aged 6 to 12 months, we mainly examined differences in behavior and attitudes towards introducing solids between mothers using a baby-led and spoon-feeding approach. Mothers who adopted a baby-led approach used a more responsive feeding style than those who were spoon-feeding.¹ The baby-led mothers were less likely to pressurize their baby to eat more or to monitor and worry about exact intake of energy and nutrients. We found they were also less anxious about the weaning process in general, including concerns about mess, waste, intake and choking. We hypothesized that this more responsive and laid-back approach might promote healthier eating behavior and weight in the baby-led babies. At this point we also found that mothers who were following a baby-led approach tended to introduce solid foods later, have breastfed their baby for longer and had a higher level of education and more professional jobs.³ We made sure that these factors were

controlled for throughout our further research as it could be that family background and wider health behaviours affected outcomes for the babies.

We then followed these babies up a year later when they were aged 18 to 24 months and asked mothers to report their babies weight and eating style.⁴ We found that babies who had followed a baby-led weaning approach were less likely to be overweight compared with those following a spoon-fed approach but there was no difference in risk of underweight. Moreover, mothers following a baby-led approach were more likely to describe their toddler as a less fussy eater who was less likely to overeat. This was independent of other factors such as timing of introduction to solid food, breastfeeding duration and maternal demographic background—all of which are factors associated with healthier weight and eating styles. Similar data were found by Townsend and Pitchford² in another data set exploring the diet and weight of preschool children who had been weaned using a baby-led or spoon-fed approach. Children who had been baby-led weaned were less likely to be overweight and more likely to eat complex carbohydrates compared with the spoon-fed group.

It is logical that a baby-led approach may promote healthier child feeding practices and lead to healthier eating habits and weight gain but we now need to conduct larger, clinical studies and potentially rigorous randomized controlled trials of the method to explore this. The biggest barrier at the moment in the United Kingdom is a lack of official recognition of the approach by the Department of Health. Without this guidelines cannot be produced and without guidelines and recognition, not only do parents struggle to find information on baby-led weaning but it is also more difficult to get funding for further research. However, without funding we cannot conduct more rigorous studies to provide an evidence base for the Department of Health to consider professionals. It is rather a chicken and egg situation!

Wright: Formal evaluation evidence of BLW is still lacking, but there are some quite good observational studies emerging, albeit usually conducted in highly selected groups. The most persuasive of these is a paper by Brown and Lee,¹ which found an association between BLW and satiety responsiveness. This association could be explained by the sorts of mothers who had decided to undertake and persist with BLW, but this association persisted even after adjusting for breast feeding duration, timing of commencement of solids and measures of maternal control.

Another study compared toddlers exposed to BLW with a more conventionally weaned group and found fewer children with high body mass index (BMI) in the baby-led group. However, they also found more children who would have been categorized as underweight.²

We need a randomized control trial that compares the baby-led approach with conventional complementary feeding trials, with weight and feeding behaviour as medium-term outcomes and food choice and eating beyond hunger as later outcomes.

Baby-led weaning in the United Kingdom is still a niche activity and most healthy professionals have little practical experience of it. There is also a strong recognition of the importance of evidence-based practice and that BLW does not yet have a good evidence base.

In your opinion, what are the developmental and nutritional benefits of infant-led weaning compared with traditional weaning practices? When would you not recommend baby-led weaning?

Rapley: A key benefit is the inclusion, from the beginning, of a range of textures and tastes, rather than bland-tasting, homogenous-textured foods. This promotes dietary variety, which in turn increases the likelihood of the infant's nutritional needs being met without the risk of overeating (there is already some

evidence that BLW may help prevent childhood obesity^{9,10}). BLW also allows babies to explore foods before eating them. This would appear to have advantages for the development of fine motor skills and hand-eye coordination as well as providing the opportunity for learning to recognize individual foods. A third benefit is that, with BLW, family mealtimes become the norm, encouraging the development of social skills and providing the opportunity for the infant to mimic desired eating behaviours. Finally, BLW supports babies' autonomy, which may have implications for the development of food refusal and picky eating in the toddler years. The traditional practice of puréeing foods, often as blended "meals," and feeding them by spoon denies babies these opportunities.

There are no circumstances in which I would not recommend a basic baby-led approach but there are some in which it would clearly be unsafe to rely on the infant to take care of his own needs without support. Thus, infants born pre-term may need additional supplements (eg, of iron and zinc) before they are ready to feed themselves with sufficient foods to complement their intake of breast milk or formula. Babies with developmental delay or physical anomalies are likely to need practical support, which may involve some spoon-feeding and puréed foods.

If the approach taken is truly baby-led, then the individual infant's needs will necessarily be taken into account and the implementation of the approach adapted accordingly. As with other aspects of care, the aim should be to utilise and support the infant's abilities and stage of development, rather than to define him by what he *cannot* do. For example, there is anecdotal evidence that the encouragement of self-feeding promotes the development and self-confidence of infants with Down syndrome, discouraging their tendency to passivity (and that of their parents to do things for them). It has also been found useful for overcoming oral aversion in infants who have previously been tube-fed or ventilated for long periods.

Concerns have been raised about the suitability of BLW for use in developing countries, mainly because, to the uninitiated observer, it may appear to be a laissez-faire approach. There is therefore a risk that it may be misunderstood. Of course, when incorrectly implemented BLW has the potential to be harmful. However, it is important to realize that letting the infant feed himself is not itself a predisposition to harm. It could be argued that there is a greater chance of neglect where the infant is reliant on the parent to feed him. BLW requires only that nutritious food be made available. As such it is potentially *less* demanding on the parent than the need to constantly observe the infant for cues to the next mouthful. Interestingly, Aboud et al¹¹ found that self-feeding toddlers ate more mouthfuls than those who were being spoon-fed. The issue for developing countries would seem to be more about the availability of a range of nutritious foods which would permit BLW than about attention to whether or not the child is eating.

Forste: I think one of the greatest benefits of infant-led weaning is that feeding, whether drinking breast milk or eating solid foods, is directed by the infant, not the mother or caregiver. Infants can then learn to recognize feelings of satiation and can learn to regulate their eating which is important as they develop; this ability can reduce risk of early childhood obesity.³ Such feeding practices encourage the mother to bond with the infant and to pay close attention to infant cues in terms of well-being. This can benefit both the child's physical and emotional development. I would not recommend BLW if the infant is not growing or receiving sufficient calories for optimal development. In cases where the infant doesn't consume sufficient calories on his or her own, the mother may need to encourage feeding.

Cameron: In 2013, we wrote a review on BLW⁴; at this stage there was no clear evidence to support developmental and nutritional benefits of BLW. However, there are some observational studies which have reported associations between BLW and reduced obesity.^{5,6} For sometime

now we have known that opportunities to explore play help children develop. In my opinion, BLW allows the child another opportunity to learn about the world. Eating is fundamental to human health and BLW allows the child the opportunity to learn about hunger, satiety, food and eating. Children following BLW can eat at their own pace, and can stop when they are full (just as they do with breastfeeding). BLW also encourages families to eat together and to share family foods, and research tells us that family meal times may be a very important component of healthy eating habits. I think BLW is probably fine for most healthy children who begin solids at the recommended age of 6 months; however, there are some instances where BLW may not be appropriate or should be very carefully monitored if being used. These would be cases when swallowing issues or developmental delay are present. Furthermore, if solids are introduced before the recommended age of 6 months, there may be an increased risk of choking for the child.

Brown: The key benefit of BLW in my opinion is the control it affords to the infant. Infants are allowed to self-feed and stop when they are full and we know that this approach to feeding is beneficial in older children. Even if a responsive approach is taken to spoon-feeding, the caregiver will still not know when their baby is full and may carry on offering more food. Yes, a baby will likely turn their head away when they have had enough, but at what point is this? When they begin to feel full, when they are full or when they are overly full and cannot take another mouthful? We don't know. In adults, if someone offers you some food, you are more likely to accept it and eat it compared with if you had to go and get that food yourself—the idea is placed in your head. This may explain possible decreased risk of overweight and better ability to control appetite amongst children who were baby-led weaned.

A beneficial aspect of the method is the likely slower speed of eating. When a baby feeds themselves, especially in the

early days when they are learning how to pick up food and get it to their mouth, speed of eating is likely to be much slower compared with being offered food on a spoon when someone else is ultimately in control of the pace of the meal. Also with eating family foods, it is likely to take longer to chew and swallow the food compared with a puree. Chewing a carrot, for example, will take longer than swallowing a carrot puree. We know that in adults, those who take longer to eat a meal, stop eating sooner as they have a chance to recognize that they are full. It is also possible that when a baby joins in a family mealtime—and they are allowed to feed themselves—then they have more opportunity to take longer over their meal. “Feeding the baby” is no longer a task that happens in isolation (with the temptation for it to happen quickly) but something that happens when the family is eating their meal.

A further benefit is the type of food that babies will be offered. Foods are far more likely to be appealing in taste in their whole form, for example, a whole carrot compared with a pureed carrot. Moreover, food is not just about taste—it is about texture. Picking a carrot stick up, feeling it in their hand and the way it feels in their mouth is all part of the learning process and enjoyment of food. This may reduce fussy eating in children firstly due to more positive first experiences with food and secondly because children recognize food in its whole form. Children aged around 12 to 24 months are naturally predisposed to be wary of new foods (in early times it would have protected them from eating poisonous berries, for example). If a child already recognizes a carrot as a carrot, this decreases the risk of them rejecting it—compared with the child who rejects the carrot stick despite enjoying pureed carrot.

It is also possible that this learning experience enhances ability to recognize the energy density of food. As adults we have learned that different foods are more likely to make us feel full (eg, a burger) or less full (eg, an apple). Over time, after eating these foods a number of times, we learn to link our visual, oral

and olfactory experiences to how full we felt after eating it. So on future occasions we know a burger will leave us feeling full. It is possible that baby-led weaned babies learn this experience sooner as they match what a food looks like to their experience of fullness. If a food is pureed, this matching does not happen in the same way—and moreover, many commercial purees have an energy dense base disguised by a less energy dense taste. For example, an apple puree may have a heavy rice base to it. Rice is calorie dense and makes the infant feel fuller whilst the taste of apple should be associated with feeling less full.

In terms of who should not follow a baby-led approach, I think a decision to follow a baby-led method needs to be taken by individual parents considering what is best for their baby and family. Parents need to feel confident and informed about the method. If a mother is very anxious, mealtimes are unlikely to be positive. BLW might not be for everyone, but the messages of allowing baby to be in control and to have opportunities to explore food needs to be given even if spoon-feeding.

Some instances where BLW may not be suitable could be when the baby has developmental difficulties and cannot sit supported by themselves or self-feed. It is possible that for some babies with nutritional difficulties such as failure to thrive or potentially severe reflux or poor weight gain, the method might not be appropriate.

Wright: Baby-led weaning should reduce mealtime coercion, as well as encouraging the child to eat in a response to appetite, rather than external pressures. It is also an approach that is specifically aimed at infants aged 6 months and older. Much of our thinking still unconsciously assumes that complementary feeding is being introduced to much more immature infants, hence the emphasis on sloppy “spoonable” foods. The BLW movement has changed our understanding of what young infants can do early in the solid feeding

process and helped us make the advice we give to parents more developmentally appropriate.

A worry about more general BLW is that it might be attempted in children who are not developmentally capable. To be able to undertake BLW, an infant needs to be able sit with only limited support, reach out and take things to their mouths. In our cohort study,³ 15% of children had not yet reached out for food by the time they attained the age 7 months, suggesting they would not be capable of self-feeding when they nutritionally required it. These children on the whole went on to be slow in other aspects of development such as walking and talking, suggesting that this is not simply a skill that can be acquired with stimulus.

In contrast, skills like being able to chew or move the build of food through the mouth seem only be acquired with exposure and practice. BLW assumes that the child will take little or no useful solid food in the first few months while they acquire these skills. This contrasts to the WHO guidance that solid feeding should begin by the age of 6 months, at which point breast milk is unlikely to be able to meet nutrient needs.⁴ This may not be a problem in a child who has plenty of reserves and is continuing to breast-feed, but if slavishly applied there could be nutritional risk to the child. It is worth noting that in the study described above,² 5% of the BLW infants had a BMI below -2 SD ($2\frac{1}{2}$ times expected rate) and 2% of children had a BMI below -3 SD, placing them into the severe malnutrition category.

Another group where BLW could be disastrous is families where there are low levels of supervision. In the developing world, what we call BLW would be called “laissez faire feeding” and this has been described most commonly in communities with high levels of malnutrition.⁵ There is an assumption now that BLW is in fact closely supervised and monitored by parents, but if more generally adopted it could feasibly become a justification for neglectful feeding practices.

You have been asked to create an educational pamphlet for new parents titled “Three Keys to Successful Baby-Led Weaning.” From your own perspective, please identify the three KEYS to success, along with your reason for selecting them.

Rapley:

1. Share mealtimes with your baby whenever possible. Offer him the same healthy foods that the rest of the family is eating, in sizes and shapes that he can manage (stick-shaped pieces and/or strips of food will be easiest for him to grasp, at first). Lightly cooked vegetables, raw fruits, cheese, well-cooked eggs, cooked meats and grain-based products are all suitable, provided the normal rules concerning salt, sugar, and so on, are followed. Place a clean mat underneath where the baby is sitting, so that the floor is protected and dropped food can be handed back.

The rationale for this is that the baby will be able to watch others eating the same foods and know that they are safe to eat. He will be able to choose from among them according to his appetite and feed himself without too much wastage. He will also benefit from being part of a social family get-together.

2. Ensure your baby stays in control of his eating. This means trusting him to know when to begin exploring solid foods, what (if anything) to eat at a particular meal, how quickly to eat, and how much to eat. It also means allowing him freedom to explore (or “play with”) food and not attempting to “help” him to eat if he seems reluctant or to be having difficulty.

The rationale for this is respect for the baby’s innate ability to regulate his intake according to his appetite. In addition, the use of the individual (normal) infant’s

manual and oral abilities as a guide to his overall developmental readiness ensures that solid foods are introduced at the right time and pace for him.

3. Ensure basic safety. Your baby should be sitting upright to eat, not slumped forwards or leaning back. Follow normal rules concerning the avoidance of small, round or hard foods and make sure your baby is the only person to put food in his mouth. Be sure you know the difference between gagging (which is common in the first couple of weeks) and true choking (which is extremely rare).

The rationale for this is that sitting upright allows the infant to use both hands to eat and to maintain his airway. It also means that if he gags or wishes to eject a mouthful, the food will naturally fall out of his mouth. Allowing the baby to stay in control helps to ensure that food does not make its way into his mouth until he is ready and able to deal with it.

Forste:

1. The first key is to breastfeed exclusively until the infant is about 6 months of age. In the United States, some 70% of infants begin breastfeeding at birth, but only about 36% are breastfed to 6 months, and only 15% are breastfeed exclusively.² The first key to success is to breastfeed exclusively rather than supplementing with formula and especially solid foods prior to 6 months of age. This will provide the best nutrition for the infant early in life.¹
2. The second key is to introduce solid foods that the infant can feed her or himself at about six months. Continue with breastfeeding until the infant is about 1 year of age or no longer desires to continue breastfeeding. This will ensure that the infant receives needed calories in addition to breast milk during the first year of life and that feeding continues to be baby-led.

3. The third key is to pay attention to the infants' feeding cues. By allowing the infant to breastfeed and then pull away when full, as well as to feed her or himself solid foods, the infant learns to stop when satiated. Parents should not continue to push food on the infant by expecting her or him to finish the bottle, or jar of food, and so forth. Not paying attention to the infant's cues of satiation can encourage over-eating and increase the risk of early childhood obesity.³ Mother-led feeding encourages the infant to depend on external cues, rather than to develop internal cues of satiation.

Cameron:

1. Be patient—meal times can take a long time, especially in the early days as the child is learning to eat.
2. Be calm about coughing and sputtering—it is most likely that the child is gagging not choking. Gagging is a normal part of learning to manipulate food in the mouth. However, always watch your child when they are eating, and never leave them alone with food. It is also prudent to learn first aid for children.
3. Get a big plastic mat that can go under the highchair to catch any food that lands on the floor.

Brown:

1. Trust your baby:

Your baby will eat solid foods but it may not seem like they eat a lot. This does not mean that they are not getting enough—guidelines suggest they only need up to 200 calories a day from solid foods at most. In the first year most of their nutrition should still come from milk. In the early days they might not eat very much of the food you offer them but this will change over time. Do not pressure them to eat more than they need. Do not worry too much about them not eating enough. Offer them different types of food to try and give more milk if needed.

2. Don't worry about the mess, waste and time

Food is not just about energy. Offer your baby a variety of new foods and let them experiment, explore and learn about what food looks like, feels like and taste like. This will likely involve dropping some on the floor and wiping some all over their face! Start baby-led weaning expecting this and seeing it as part of the learning process. You can buy large bibs that cover everything to keep clothes clean and a cheap mat for the floor. Baby-led weaning is also not going to be a fast process. Meals can take time whilst your baby learns to feed themselves and enjoys seeing what food can do. Plan for this and enjoy the process as much as the outcome.

3. Allow your baby to join in mealtimes

One of the benefits of baby-led weaning is that your baby can eat family foods. This means they can also join in family mealtimes far more easily. This has benefits for everyone—eating does not need to be a separate process that takes extra time. Baby can eat when you eat and you do not need to cook twice. Second, everyone can enjoy their meal together—you do not need to be spoon-feeding baby whilst you try and eat your meal. Finally, meal times are about more than just food. They are about sharing the experience, learning about food and being part of the conversation—whether that is just you and your baby or the wider family. Enjoy!

Wright: I have no experience yet with promoting baby-led weaning.

References for Gill Rapley

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Gill Rapley worked for 20 years as a health visitor (similar to what in many countries is called a public health nurse). She has also been a midwife and a breastfeeding counsellor/lactation consultant. From 1996 to 2010 she worked for the UNICEF UK Baby Friendly Initiative. She gained a master's degree in 2005 and is currently studying for a PhD via research in the area of infant feeding. She is credited as the originator of the term "baby-led weaning" to refer to the introduction of solid foods (e-mail: gill@rapleyweaning.com).

Renata Forste holds a PhD in sociology from Chicago University. Her research at Brigham Young University focuses in large part on the relationship between the status of women and the health of their children. In particular, she has examined how the education of women, as well as breastfeeding and birth-spacing, are related to child survival in Latin America, as well as the relationship between breastfeeding and child health in the United States (e-mail: renata_forste@byu.edu).

Sonya Cameron holds a PhD in human nutrition from University of Otago in New Zealand. Her research examines the impact of baby-led weaning on the prevalence of obesity in young children (e-mail: sonyalcameron@gmail.com). She is now continuing to work in the area of child health research as a postdoc research fellow.

Amy Brown, PhD, is an associate professor in public health at Swansea University, in the United Kingdom. Her research explores the importance of nutrition during the first year of life upon longer term child weight and eating behaviour. She is especially interested in the factors that influence whether infants are breastfed or formula fed and when and how they are introduced to solid foods. In particular, her work examines how complex psychological, societal and cultural factors can affect maternal experiences at this time (e-mail: a.e.brown@swansea.ac.uk).

Charlotte Wright is a paediatrician and epidemiologist in Glasgow. She has developed an internationally recognised programme of research into growth, nutrition and screening in early childhood. Her interest in nutrition began with the study failure to thrive but now extends to all aspects of growth and feeding in preschool children and obesity in older children (e-mail: charlotte.wright@glasgow.ac.uk).
