

Formula Feeding: How Much and How Often to Feed Your Baby

You should not feel guilt or shame about offering formula; the most important consideration is making sure your baby is fed.

By Susan Reslewic Keatley April 18, 2020

Caroline Tompkins for The New York Times

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Four out of five of babies born in the United States begin life breastfeeding, according to the Centers for Disease Control and Prevention's 2018 [Breastfeeding Report Card](#). But by 6 months, 75 percent of babies receive at least some formula, despite the [American Academy of Pediatrics' recommendation](#) that babies be exclusively breastfed during this time.

While most new parents receive guidance on breastfeeding before and after the births of their babies, advice on formula feeding is harder to find. What kind should you buy? When using powdered formula, do you need to boil the water first? If "breast is best," will my baby be O.K. drinking formula? It can feel daunting to go down the formula path, hunting for accurate information.

Whatever your reason for formula feeding, the two pediatricians, gastroenterologist, pediatrics professor, lactation consultant and postpartum doula I spoke with unanimously agreed that you should not feel guilt or shame about doing so. The most important consideration, according to these experts, is to make sure your baby is fed. And with the bounty of high-quality and ever-improving baby formula on the market, you can feel certain your baby is getting the nutrition she needs to thrive. It is also important to know that formula- and breast-feeding can coexist, that formula brands are more alike than different, and that careful attention must be paid to formula preparation and storage.

Make a plan before baby, but be flexible after.

Some parents know before their baby is born that they'll feed formula, especially if it's for medical reasons. "Certain medications, breast surgeries and cancer can interfere with

breastfeeding," said Dr. Laurie Schulwolf, M.D., a pediatrician at Tribeca Pediatrics in Manhattan. Adoption and surrogacy may also leave breastfeeding off the table. Other mothers may start exclusively breastfeeding, but then go back to work and face issues with milk supply. Or there may be some kind of breastfeeding issue from the start, said Wendy Wisner, a board-certified lactation consultant (IBCLC) in private practice in New York City. "The baby could have a tongue tie," said Wisner, referring to a condition in which a band of tissue attaches the tip of the tongue to the bottom of the mouth, impairing sucking "or perhaps the mother was told to breastfeed on a schedule that does not ensure supply," said Wisner. While some of these breastfeeding issues can be addressed without the help of formula, making it work can add more stress to the already stressful experience of new parenthood.

"We see so many mothers who feel like they are failures, and it's such a sigh of relief when the doctor says formula is O.K.," said Dr. Dina DiMaggio, M.D., a pediatrician at Pediatric Associates of N.Y.C. and co-author of "The Pediatrician's Guide to Feeding Babies and Toddlers." Devon Clement, a postpartum doula and founder of "Mama's Best Friend," a newborn care services company, agrees.

"Formula can take a lot of pressure off the breastfeeding parent's plate," Clement said. She stressed the importance of making choices that make you happy as a parent, when

you can, as there are many parts of parenting that may not allow for such choices.

Some parents choose to feed mostly formula, while others use formula as an occasional supplement to breastfeeding. "It doesn't have to be one way or the other, formula or breastfeeding," said DiMaggio. Citing her experience with clients, Clement said that some supplementation can actually help with breastfeeding. She discussed a 2018 [study showing that very early supplementation](#), before the onset of mature milk production, does not interfere with exclusive breastfeeding at 1 month.

Resist a quest for the "perfect" formula.

New parents could spend weeks researching the many Food and Drug Administration-approved formulas on the market, but this is not necessary, said the doctors I spoke with. In "The Pediatrician's Guide to Feeding Babies and Toddlers", DiMaggio and Dr. Anthony Porto, M.D., M.P.H., an assistant professor of pediatrics at Yale University state that quality and content are similar across formula brands.

Full-term, healthy babies should do well on a standard cow's-milk-based formula, according to DiMaggio and Porto. If you suspect your baby has a cow's milk protein allergy (identified by loose, mucous stools with blood), consult with your pediatrician about switching to a formula

with a protein that has been hydrolyzed, or broken down into more digestible components. While the main source of carbohydrate in breast milk is lactose, the main source of carbohydrate in formula may be lactose, or something else like corn syrup or table sugar. Some parents may grow alarmed over the presence of corn syrup, but “some babies might not digest 100 percent lactose as well as a mixture of lactose and something else,” said Dr. Bridget Young, Ph.D., an assistant professor of pediatrics and public health at the University of Rochester Medical Center. “If your baby is thriving, then your formula is working — don’t switch,” she continued, citing potential stress on the baby’s digestive system, and the stress on the family thinking they need to find the perfect formula.

While compelling evidence on the benefits of additives like prebiotics and probiotics is lacking, one exception is milk fat globule membrane (MFGM), a protein present in breastmilk that contains several important biologically active factors. In [early studies](#), MFGM supplementation has shown to benefit brain development and the immune system, said Young. If additional research continues to show benefits, Porto believes nearly all formulas will soon contain it, just as they currently contain DHA and ARA, fatty acids which aid eye and brain development.

Follow directions for preparation and

safe storage.

Formula comes in three different preparations: ready-to-feed, powdered and concentrate. Powdered and concentrate formulations will require adding water in specific ratios. Not getting those ratios right could cause severe problems for your baby, such as vomiting, dehydration, or seizures. As long as your tap water source is safe (check with your pediatrician if you aren't sure), it can be used to mix with formula without boiling it first. "We don't recommend bottled water or 'baby' water, since it is expensive and unnecessary," wrote Porto and DiMaggio in their book. Also, if your water does not contain fluoride, your baby might need a supplemental source after six months, they wrote, and should be discussed with your pediatrician.

Once a bottle of formula has been prepared at room temperature, or has touched your baby's lips, it must be consumed within an hour or thrown away. This is true even if the formula has been mixed with breastmilk, which alone has a longer room temperature lifetime. A container of ready-to-feed formula, once opened, can be kept refrigerated for 48 hours; a bottle of formula prepared from powder can be kept refrigerated for 24 hours.

[How to feed a combination of [breast milk and formula](#)]

Use proper bottle-feeding technique and the right equipment.

If your baby appears uncomfortable when feeding her formula, check your bottle-feeding technique before blaming it on the formula, said Clement. She recommended holding the baby upright during and after feeding, and letting her control the pace of feeding. "The baby might drink four ounces in 10 minutes, then need a break, and drink two more ounces 30 minutes later," said Clement. "Don't force the baby to drink it all at once, or assume the baby is done when she might be taking a break."

Wisner spoke about ["paced bottle-feeding,"](#) a feeding technique meant to mimic breastfeeding (slower feeding with a wide bottle nipple that incorporates plenty of holding and bonding) that can be especially helpful to parents seeking to maintain the breastfeeding relationship.

Both Clement and Porto spoke about the importance of changing nipple sizes as your baby grows. "Sometimes it might be the equipment that's causing the problem," said Porto. Porto and DiMaggio recommended trial and error to determine what kind of bottle to use. Bottle parts should be sterilized before the first use, per the manufacturer's instructions, and washed in hot soapy water thereafter. Porto recommended purchasing a diaper bag with a cold insulated area and, when on the go, packing a formula

container with divided sections, each containing enough pre-measured powdered formula for one bottle.

Consider vitamin D and iron; avoid bulky solids close to bottle times.

While most formulas contain vitamin D, additional supplementation may be required if your baby is drinking less than 35 ounces per day. Your pediatrician will help determine if supplementation is necessary, said DiMaggio. Because formula is often supplemented with plenty of iron, formula feeding parents should pay special attention to iron-rich foods when formula is no longer part of the baby's diet, said Schulwolf. While you'll naturally start to decrease formula volume as solids are introduced, be wary of cutting back on formula too quickly, said Clement. Allow enough time between feeding bulky but low-calorie foods, like vegetable purées, and giving a bottle, so your baby has enough room in his tummy for formula.

Wean gradually and mix formula with milk.

At 12 months, formula is no longer necessary and most babies can begin drinking cow's milk. DiMaggio and Porto recommended mixing formula with cow's milk, and gradually decreasing the ratio of formula over time. Young said that parents should not stress out about weaning at exactly 12

months, and remember, “the process of weaning begins with the first solid foods, and that a 10- to 14-month time for weaning is O.K.” She said to be flexible and respect your baby’s lead.

Susan Reslewic Keatley holds a Ph.D. in chemistry and blogs at [I Love a Good Story](#). She is the mother of two (mostly formula-fed) children.