



It's Called
FORMULA
for a Reason™

**Tips and Tricks from Experts
and Parents Who've Been There**

By: The Editors of Storebrandformula.com

It's Called Formula for a Reason™

Tips and Tricks from Experts and Parents Who've Been There

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For permissions contact:

Perrigo Nutrition

P.O. Box 2109

147 Industrial Park Road

Georgia, VT 05468

www.storebrandformula.com

This publication is intended to provide authoritative information regarding the subject matter covered. If you require medical advice or other expert assistance, you should seek the services of a competent professional. Always consult with your child's pediatrician before making infant feeding decisions.

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WELCOME

This e-book is dedicated to new and expecting parents like you—and the people who inform your decision making: experienced parents, grandparents, friends, healthcare professionals, and experts on everything related to parenting and baby. These pages were curated from [Storebrandformula.com](https://www.storebrandformula.com), an online resource that contains important advice from published authorities who know what they are talking about.

As new or expecting parents, you might feel overwhelmed by a constant barrage of marketing messages. This confusing—and oftentimes, anxiety-producing—array of advertising and promotional messages hits you seemingly from every direction and inspires a complicated set of emotions. Moms are so intent on absorbing as much baby-related information as possible and making the right purchasing decisions, that it can be easy to overlook inexpensive options that are just as safe and effective for baby.

It's Called Formula for a Reason: Tips and Tricks from Experts and Parents Who've Been There, helps alleviate some of this confusion and arms you with information and practical advice from thought leaders on subjects that interest parents. In these pages, a pediatrician offers guidance on nutrition, food safety, and infant feeding. A consumer-savings expert helps families save money. A dietitian recommends how to start introducing solid foods to baby. A seasoned nanny and working-mom expert shares tips on returning to work after baby. From traveling with baby and using formula on the go to insights on budgeting and smart shopping, the tips and tricks in this e-book will help you find your own “formula” for success while navigating the joys and challenges of parenthood.

Storebrandformula.com is a resource supported by Perrigo Nutrition, the largest supplier of store brand infant formulas in the United States. We make formulas that are found in the most respected stores, including Walmart (Parent's Choice), Sam's Club (Member's Mark), Target (up & up), Kroger (Comforts for Baby), CVS (CVS Health), Walgreens (Well Beginnings), and more.

Perrigo has been making these high-quality, store brand nutrition products under the oversight of the Food and Drug Administration (FDA) for more than 20 years. We produce store brand infant formulas in FDA-inspected facilities in Vermont and Ohio, U.S.A. Our dairy ingredients are sourced from leading dairy markets, including the United States, Canada, and New Zealand.

We hope you find this e-book useful on your journey to becoming the best parent you can be. Please visit our website to read more articles by other experts and watch entertaining and informative videos on our [“Parents Newsfeed”](#) page. Learn from parenting, savings, and nutrition professionals. Learn from veteran moms and dads who have been there.

Congratulations again on having a baby and thank you for reading.

—The Editors

Why did we create **THIS E-BOOK?**

So, why did we create this e-book? We surveyed moms across the country* to gain insight into their thoughts on preparing for parenthood and safely feeding baby. Our research confirmed what we thought we already knew: moms need better resources to prepare them for their journey.

With countless baby books, parenting classes, blogs and social media postings, today's moms are inundated with advice from experts: "breast is best;" "let baby cry to get them to sleep;" "never let them sleep with a binkie." Often conflicted, new and expecting moms must tread carefully around well-meaning relatives and make decisions that are right for their family.

Are Moms Prepared for Motherhood?

Despite all the available information, our "Feeding Realities Survey" found that many new moms do not feel prepared for their role, especially when it comes to feeding baby. For instance, more moms are reading parenting books (67 percent) than taking prenatal education classes (54 percent), but only one-third of moms feel that parenting books prepared them for feeding baby. Additionally, one in five moms do not feel prepared (21 percent) by hospital staff for how to feed baby with infant formula, yet two in three moms end up using formula in baby's first year.

Do Moms Know How to Safely Feed Baby?

When it came to safety, one in five moms (21 percent) said they have used more water than required by the instructions when preparing infant formula. Their top reasons for diluting formula were: to help make it easier to digest (35 percent); to help baby poop easier (33 percent); and to make formula last longer (24 percent). Further, nearly one third of moms (32 percent) were unsure if adding extra water to formula is dangerous; 15 percent said it was not dangerous. The survey also revealed that:

Nearly one in 10 moms (**9 percent**) have attempted to make their own baby formula, with the majority stating it was healthier for their baby (**48 percent**).

Half of moms (**51 percent**) have thrown a partially used infant formula bottle back in the fridge to use for the next feeding time.

One in four moms (**26 percent**) admitted that they have skipped washing their hands before preparing baby's bottle.

Half of moms (**50 percent**) said they always or sometimes use the microwave to make a bottle.

Other Survey Findings

The biggest worries for moms during those first few months of motherhood included: baby getting sick (54 percent), how much to feed baby (37 percent), and the costs associated with baby (33 percent). Additionally, nearly half (49 percent) of moms do not believe store brand formula provides complete nutrition and another 22 percent do not believe store brand formula meets the same FDA standards as nationally advertised brands.

Why did we create

THIS E-BOOK (CONT.)

It's called formula for a reason.™

The Feeding Realities Survey highlights clearly revealed that many moms are not prepared for the challenges that lie ahead. Alarming, our survey also highlighted the need for safety education despite moms' access to more resources than previous generations.

The title of our e-book explains a fundamental truth about infant formula: it's considered "formula" and not "food" by regulators and the medical community. All infant formulas sold in the United States must meet the same FDA standards. This requirement and truth is enforced by federal law. Store brand infant formulas meet the same FDA standards as the nationally advertised brands, but cost up to 50 percent less money. ** That's the truth behind infant formula.

It's formula—a formula for nutrition and a formula for safe preparation and use. The FDA sets this recipe. And we don't veer from it. Ever.

In short, we published this e-book to help you prepare for motherhood.

* Survey Methodology

This survey was conducted between July 23 - August 22, 2018, among 2,000 nationally representative Americans between the ages of 18 and 65 who currently have a child between the ages of one and three, using an email invitation and an online survey. Margin of error is +/- 3 percent.

** Total savings with store brand infant formula calculations based on a price per fl oz comparison of store brand infant formulas and their comparable national brands. Retail prices are from a September 2018 retail price survey of assorted stores. Actual prices and savings may vary by store and location.

How to use

THIS E-BOOK

This e-book is designed for use by new and expecting parents like you, and by guardians and caregivers searching for advice that may help them and the infants they care for. You can read the book cover-to-cover, or you can click on chapters and topics that interest you or meet your immediate needs.

Please remember to always consult with your baby's pediatrician on health-related issues and before making infant-feeding decisions.

BREASTFEEDING AND FORMULA

Mother's milk provides all the nutrition your baby needs and is recommended by healthcare professionals. Commercial infant formula was introduced in the 1860's to address the extremely high infant mortality rates that were a reality in the 19th Century. Formula-feeding became a life-saving alternative for many and continues to be the only safe substitute for breast milk that supports infant growth and development today.

The American Academy of Pediatrics (AAP)—an organization of 67,000 pediatricians committed to the optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults—recommends breastfeeding and recognizes iron-fortified infant formula as the only other safe feeding option. Healthychildren.org, an AAP educational resource offering pediatrician-approved health information and advice for moms and dads, reinforces the importance of federal oversight and compliance when it comes to infant nutrition.

For starters, the website explains congressional legislation governs the ingredients and nutrient specifications used in all infant formula. FDA regulations implement the Infant Formula Act. The agency also monitors the quality and safety of all infant formulas sold in the United States and conducts routine inspections of all manufacturing facilities in the country.

Breastfeeding is recommended and it is what nature intended. But the reality of breastfeeding for long periods of time can be challenging. According to Parents.com,* 85 percent of new moms eventually use formula. That's why the first part of this e-book focuses on infant nutrition and formula; the reality is you may decide to formula feed at some point during that first year and will need to know more about this safe and nutritious option for baby.

Infant formula is the only safe alternative to breastfeeding. Any other unregulated concoction, including homemade formula and whole cow's milk, is a recipe for disaster for infants under 12 months of age.



Infant formula is the only safe alternative to breastfeeding. Any other unregulated concoction, including homemade formula and whole cow's milk, is a recipe for disaster for infants under 12 months of age.

Proper infant formula

USE AND SAFETY

“Infant formula is the most highly regulated food, with robust food safety, food security and quality programs in place to ensure every product meets or exceeds the expectations of consumers, health care providers and regulatory bodies. Formula is also the only safe, nutritious and recommended alternative to breast milk.” - The Infant Nutrition Council of America

Remember: It's called formula for a reason. And it's essential that you know how to prepare formula safely and follow the instructions on the manufacturer's label. Preparing formula is not difficult once you learn the fundamentals. The instructions below hold true for both 100-percent formula-fed babies and those who are fed both breast milk and formula.

Health authorities recommend the following steps to maintain safe feeding practices:

- ✓ Boil new bottles and nipples for five minutes before using them the first time. Also, wash them for one minute in hot, soapy water after each use.
- ✓ Wash your hands before preparing formula and before feeding your baby to avoid contamination.
- ✓ Check the safety seal when opening a new formula container.
- ✓ Follow preparation instructions on the product label.
- ✓ Discard previously chilled bottles of formula if they have been left outside a cooler or refrigerator for more than an hour.
- ✓ Discard any excess liquid in baby bottles to help avoid the growth of bacteria found in your baby's saliva.
- ✓ Never feed infant formula that has expired or formula from a dented container.
- ✓ Never heat formula or bottled breast milk in the microwave.
- ✓ Buy formula only from reputable retailers and not from online auctions or flea markets.

Formula Dos:

- ✓ Always wash your hands before preparing infant formula.
- ✓ Read and follow the preparation instructions on the formula label.
- ✓ Use opened or prepared formula within the timeframes outlined on the container.
- ✓ Ask questions. Your pediatrician and formula manufacturer are there to help answer any questions that you may have.
- ✓ Purchase formula from reputable retailers.

Formula Don'ts:

- ⊘ Never heat your baby's bottle in the microwave.
- ⊘ Don't prepare formula using a blender.
- ⊘ Don't use expired formula.
- ⊘ Remember to check the formula container for the expiration date.
- ⊘ Don't dilute or stretch formula with extra water.

PART ONE

Understanding Infant Formula

What should we feed baby?

THE HISTORY OF FORMULA

By Sandra Gordon



The discussion about what to feed baby has been going on for a long time. Breastfeeding is what nature intended, but extremely high infant mortality rates in the 19th Century led to the introduction of commercially prepared infant formula. Formula became a life-saving alternative for many and remains the only safe substitute for breast milk. The following timeline documents the history of formula from the 1860s to today.



Late 1800s

Commercially prepared infant formula in powdered form is born. Because it's expensive, however, many parents can't afford it. From now through the 1930s and the Great Depression, most infants are breastfed through their first year. If they're given formula, it's homemade from cow's milk or from evaporated milk. Starting in 1929, during the year of the great stock market crash, soy formula also becomes available offering vegetarian, lactose-free nutrition.

1940s

Most infants are breastfed until six months then fed cow's milk after that. Homemade formula, though, is still popular among babies under six months old who aren't breastfed. **Breastfeeding rates begin to slowly decline.**

1958

Breastfeeding is out of favor. According to a national mail-back survey conducted in 1958, only 30 percent of mothers of young infants reported their babies were either completely or partially breastfed at one week of age.

1938

A watershed in U.S. history, **the 1938 Food, Drug, and Cosmetic Act is enacted.** It pioneered policies to protect consumer's economic wellbeing and created food standards to unify the identity, quality, and quantity of food in containers. This legislation intended to level the playing field for the value consumers could expect.

1951

Commercially prepared infant formula becomes available in concentrated form and moms love the convenience. **Liquid concentrate formula is the predominant form of infant formula sold for the next 20 years.** Still, in the early 1950s, most infants are breastfed until six months then switched to cow's milk because it's less expensive than formula.



THE HISTORY OF FORMULA

1960

Liquid ready-to-feed formula becomes available in the marketplace.



1970s

Breastfeeding rates continue to decline as more women enter the job market. Fewer than 25 percent of infants in the United States are breastfed in the hospital compared to today's standard of 75 percent. An article in the *New York Times* published April 8, 1973, reports the World Health Organization (WHO) deplores the trend, suggesting the Western "fashion" of not breastfeeding is being diffused to the rest of the world. **Typically, infants who aren't breastfed are given commercially prepared infant formula until they are four to six months old, then switched to cow's milk because it's cheaper than formula.**

1980

Breastfeeding is back in favor because of numerous government reports citing the advantages of breastfeeding.

The U.S. Department of Health and Human Services establishes its first ever national health objective for breastfeeding. The goal: By 1990, 75 percent of women breastfeed in the hospital and 35 percent are still nursing when their babies are six months old.

1982

Breastfeeding rates peak, with 62 percent of moms initiating breastfeeding and 30 percent continuing to breastfeed six months later.

1989

Carnation® and Gerber® brands begin advertising directly to consumers through TV commercials, print ads, and coupons. Healthcare professionals express concern that this practice will negatively impact breastfeeding rates and infant health.

Previously, infant formula companies in the United States marketed their formula to healthcare professionals only. Only 52.2 percent of moms initiate breastfeeding and 19.6 percent continue until their baby is at least six months old.

The Infant Formula Act of 1980, an amendment of the Federal Food, Drug, and Cosmetic Act of 1938, is signed into law by President Jimmy Carter. This amendment regulates infant formula to ensure the safety and nutrition. It establishes minimum, and in some cases, maximum, nutrient levels for infant formula, standardizing the nutritional content across all brands. The Act also mandates quality control procedures for producing formula and gives the Food and Drug Administration (FDA) the authority to enforce standards for formula across the nation.



THE HISTORY OF FORMULA

1990s

Breastfeeding rates rise again throughout the 1990s as more women begin to initiate breastfeeding in the hospital; other public-education campaigns and promotional efforts influence infant feeding.

Formula sales dip in the mid-1990s by 10 percent, then hold steady.

2000

Breastfeeding rates peak again.

Sixty-eight percent of moms initiate breastfeeding in the hospital; 31 percent are still breastfeeding their babies at six months of age.

2011

The U.S. Surgeon General, Regina M. Benjamin, M.D., issues a "Call to Action to Support Breastfeeding," **outlining steps to remove some of the obstacles women who want to breastfeed their babies may face**, such as encouraging employers to allow nursing moms to have their babies close by so they can feed them during the day.

Today

Breastfeeding is going strong; 75 percent of moms start out breastfeeding in the hospital and 47 percent are still at it six months later. Still, formula continues to be popular. According to the United States Department of Agriculture, more than 80 percent of infants three to 11 months old in the United States are fed at least some infant formula; *Parenting* magazine cites 85 percent of infants are fed formula.

The volume of infant formula sold in the United States is approximately 28 billion ounces per year.

1997

Storebrand infant Formulas enter the marketplace. **Store brand formulas are manufactured to the same exacting FDA standards as the advertised brands but are supplied to, and sold by, retail, club, supermarket, and drug stores under various "store brand" names.**

2001

Healthcare professionals begin to recognize store brand formula. According to a 2001 study in *Pediatric Nursing*:



Health-care professionals must help mothers determine what type of formula to feed their child, such as an iron-fortified, milk-based formula or a soy-based formula. It is also key to realize that the Federal Food and Drug Administration tightly regulates infant formula so they are all nutritionally equivalent. The only significant difference among today's term formula options is price. Most leading retailers around the country carry a store brand of formula that bears the store's name that's...regulated by the FDA, and available at a significant savings.

* Carnation® and Gerber® are registered trademarks of Société des Produits Nestlé, S.A. Store Brand Infant Formula is not made by or affiliated with Société des Produits Nestlé, S.A.



Common Formula QUESTIONS

By Lisa Thornton, M.D.

How Do I Choose a Formula for My Baby?

As a pediatrician, one of the most common questions I receive in my practice is, "How do I choose the right formula for my baby." Breast milk provides the optimum nutrition for your baby, but many women cannot or choose not to breastfeed. In that case, formula is a healthy substitute or supplement for babies who need more than mom can produce.

Most pediatricians recommend starting with an iron-fortified formula that contains lactose, the sugar found in breast milk and cow's milk. If a baby shows signs of feeding intolerance, the pediatrician may recommend switching to a soy-based formula. As long as you stay with the same type of formula (cow's milk formula or soy formula), parents can feel comfortable switching formula brands without difficulty. In other words, you can go for the least expensive formula or the one on sale week to week, if it is the same type of formula your baby is already being fed. If you want to switch from a lactose-based to a soy-based formula, or to another type formula, you should consult with your pediatrician.

Remember, regular cow's milk (whole milk) and soy milk do not contain all the nutrients that babies need in the first year of life; these types of milks are not substitutes for infant formula or breast milk. Also, cow's milk can be harmful to infants under the age of one.

How Much Formula Should My Baby Drink?

A newborn will drink one to two ounces of formula at a time. After the first two to three days of life, this will increase to two to three ounces every three to four hours. During the second month, most babies average approximately three ounces every three hours. At that point you may try to give more formula during the day so your baby can begin to sleep through the night. At approximately four to six months of age, babies drink around four to six ounces every four hours. This will increase to six to eight ounces every four to six hours after six months of age. At that time, most babies will begin taking solid food and formula intake will go back down to approximately 24 ounces a day by nine months of age. These are general guidelines.

Age	Ounces
Newborn	1-2 (at a time)
2-3 days	2-3 (every 3-4 hours)
2 months	3 (every 3 hours)
4-6 months	4-6 (every 4 hours)
6+	6-8 (every 4-6 hours)
9 Months	24 (a day)

Two of the best ways to know that your baby is getting enough formula is to **examine his or her diapers**. There should be several wet diapers per day and there should be **consistent weight gain at well-baby visits**.



QUESTIONS

Should I Wake My Baby Up to Feed?

Some newborn babies will sleep four to five hours between feedings. This may provide a welcome break for parents, but newborns need a lot of food for growth during the first month of life. After five hours, it's therefore a good idea to wake your baby up to feed. By two months of age, it's fine to let your baby sleep until he or she awakens for a feeding.

When Will My Baby Sleep Through the Night?

Most newborns will wake up twice during the night to feed. By two to three months of age, one nighttime feeding is usually enough and a typical four-month old can go seven to eight hours without a feeding. A baby who wakes to feed in the middle of the night after six months of age is usually looking for comfort and not nutrition.

How Do I Know When My Baby is Hungry?

Every baby will give the same cues to let parents know when he or she is hungry or full. Your baby will start rooting (turning his or her head to one side and opening his or her mouth as if looking for a breast), sucking on his or her hand, and smacking his or her lips. If all else fails, your baby will cry. When your baby is full, he or she will release the nipple, turn away, and often fall asleep. Don't force your baby to take a certain amount of food. Sometimes your baby will go through a growth spurt and seem to eat all the time. At other times, your baby's intake may slow down for a few days. In general, babies don't over eat or under eat; they take what their body needs for nourishment and push the rest away.

Should I Be Concerned about My Baby Spitting Up?

Spitting up is the easy flow of milk from your baby's mouth, often with a burp. Vomiting is when the flow is forceful and often uncomfortable. Almost all babies spit up when they burp during infancy. Sometimes spitting up means your baby has eaten more than his or her stomach can hold, or that he or she has swallowed gas while feeding. There is no need for concern unless your baby isn't gaining weight or is vomiting frequently. Most babies stop spitting up by the time they can sit up at approximately six months of age.



Baby Bottle Tips:

Try these tips to reduce spitting up.

- Feed your baby in an upright position.
- Don't lay your baby down for at least 30 minutes after feeding.
- Feed more slowly and burp frequently.
- Don't actively play with your baby for 30 minutes after feedings.
- If you want to put your baby in the crib to sleep, elevate the head of the bed by putting blocks under the mattress. This keeps your child's head higher than the stomach and reduces spit up.



How Do I Know if My Baby Has Allergies or Food Intolerance/Sensitivity?

Food allergies vary from mild to severe and some can even be deadly. Food intolerance or food sensitivity can be annoying and uncomfortable, but it is not serious or life threatening. Food intolerance can be confused with food allergy, so it is important for parents to know the difference.

Food Allergy

A food allergy happens when the body's immune system reacts against proteins found in foods. The reaction usually happens shortly after a meal. Symptoms of a food allergy include hives (red spots that look like mosquito bites), itchy skin, swelling of the face, tongue or lips, breathing problems like wheezing, sneezing, and throat tightness, vomiting and diarrhea, pale skin, light-headedness, and loss of consciousness. A severe allergic reaction is called [anaphylaxis](#) and requires immediate medical attention.

Food Intolerance

Food intolerance means that a baby has trouble digesting a particular food without the involvement of the immune system. If your baby has food intolerance, you may notice that every time he or she eats or drinks a particular food, your baby develops gas, bloating, or diarrhea. One of the most common foods that babies have difficulty digesting is lactose, the sugar in cow's milk and the most common sugar found in infant formulas. If a baby has trouble digesting lactose your pediatrician may suggest switching to a soy-based formula or pre-digested (hydrolyzed) formula. Therefore, it is critical to involve your physician when choosing formula for baby.

There is no way to prevent your baby from developing a food allergy or food intolerance, but it's best to introduce new foods one at a time with several days between each new food addition.

That way if your baby has a reaction, you can quickly narrow down the possible culprits. Allergies can run in families, so parents who have a strong allergic history should watch for similar issues in their baby. Specific needs can vary widely between children, so be sure to consult your pediatrician for guidance about your child's individual needs. When choosing formula, be sure to discuss feeding options with a healthcare professional.

Common Allergens

- Milk
- Egg
- Fish
- Shellfish
- Peanuts
- Tree Nuts (walnuts or almonds)
- Soy
- Wheat





What's in

FORMULA?

So, what's in formula? Infant formula is inspired by breast milk. That's why infant formulas are designed to mimic the nutritional characteristics of breast milk.

All infant formulas sold in the United States must meet the same Food and Drug Administration (FDA) standards. These standards require formulas to meet the same nutrient requirements; infant formulas must contain a minimum and maximum range of specific nutrients listed in the table below as mandated by law in the Federal Food, Drug, and Cosmetic Act.

Nutrients are chemical compounds in food that are used by the body to function properly and maintain health. Proteins, fats, carbohydrates, vitamins, and minerals are all nutrients. Essential nutrients—proteins, vitamins, and minerals—must be obtained from the diet and are necessary for normal growth and development. Deficiency of the essential nutrients results in disease.

According to the Academy of Pediatrics (AAP) and the medical community, breast milk contains all the ingredients your baby needs for that important first year of life. Experts also agree that infant formula is the only safe alternative to breast milk.

It's called formula for a reason; the FDA-regulated recipe for formulas calls for ingredients (nutrient specifications) that are naturally present in breast milk.

Nutrients Present in Breast Milk

Infant formulas contain the latest innovations in infant nutrition. These include optional ingredients that are not required by the FDA but are present in formulas because they occur naturally in breast milk.

These innovations—which are found in nationally advertised formulas and store brand formulas—include DHA, ARA, choline, lutein, nucleotides, and prebiotics and probiotics.

Most infant formulas on the market today contain the lipids DHA (docosahexaenoic acid) and ARA (arachidonic acid), which are essential fatty acids for brain and eye development. DHA is an omega-3 fatty acid, whereas ARA is an omega-6 fatty acid. Infant formulas also contain choline, which supports brain and eye development, and lutein, for eye health.

Nucleotides form the basic structural unit of nucleic acids such as DNA and RNA and are involved in their synthesis. Nucleotides are compounds that belong to the bioactive substances in milk and colostrum (the first breast milk produced during pregnancy). Scientific studies suggest that nucleotides are involved in lipid metabolism. Further, the presence of specific nucleotides in human milk may be a factor in the immune response of breast-fed infants.

Moms and dads generally think of bacteria as something bad. But millions of good bacteria and other microscopic organisms naturally live in your baby's gut—the home of the stomach and intestines. This ecosystem is known as the microbiome, and healthy bodies depend on good bacteria for the microbiome to function properly.

Prebiotics and probiotics are used to stimulate gut health and promote good bacteria. Probiotics contain living microorganisms—good bacteria that support digestive health. Prebiotics, on the other hand, are non-digestible fibers that go through the small intestine undigested and are fermented in the large colon. Prebiotics such as oligosaccharides found in human breast milk and infant formula stimulate the growth of good bacteria for immune support and digestive health.



FORMULA

Human Milk Oligosaccharides*

Some store brand formulas and advertised brands also include human milk oligosaccharides (HMO), prebiotics that help establish beneficial bacteria for immune support. HMOs are oligosaccharides commonly found in breast milk; the most abundant HMO is known as 2' -fucosyllactose, or 2' -FL.

2' -FL HMO is found naturally and abundant in most mothers' breast milk. The idea behind adding 2' -FL HMO to formula is so it can help nourish your baby's immune system to be more like the immune system of a breastfed baby.

Nutrient Specifications—FDA's Code of Federal Regulations

The FDA's Code of Federal Regulations ([Subpart D](#)) requires all infant formulas to contain the following nutrients at a level not less than the minimum level specified and not more than the maximum level specified for each 100 kilocalories of the infant formula. The table below lists each nutrient and their respective function for human health.

Nutrients	Function
Protein	Protein is in every living cell and our body requires it from foods to build and maintain bones, muscles, and skin. Protein quality depends on an essential amino acid pattern.
Fat	Fat is one of the key macronutrients that your baby needs for proper growth and development. In fact, fat provides about half the energy content of milk. There are different types of fat: monounsaturated; saturated; polyunsaturated; and trans fatty acids. DHA is a polyunsaturated omega-3 fatty acid that supports brain and eye development.
Linoleic Acid	Linoleic acid is a polyunsaturated omega-6 fatty acid. Linoleic acid is part of cell components and is used to produce signaling molecules in the body.
Vitamins	
Vitamin A	Vitamin A supports good vision, a healthy immune system, and cellular growth. Beta-carotene is a type of Vitamin A derived from plants that acts as an antioxidant.
Vitamin D	Vitamin D is an important nutrient for bone, muscle, and immune health. It plays a major role in calcium uptake and metabolism.
Vitamin E	Vitamin E is an antioxidant for immune health and for healthy skin and eyes.

*Not from human milk.



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Nutrients	Function
Vitamins	
Vitamin K	Vitamin K helps blood clot and prevents excessive bleeding; low levels of Vitamin K can raise the risk of uncontrolled bleeding. Vitamin K deficiencies are very common in newborn infants.
Thiamine (Vitamin B₁)	Thiamine is an essential vitamin, meaning it cannot be produced by the human body and must come from the diet. Severe thiamine deficiency, known as beriberi, is almost unknown in developed countries like the United States. Almost all cells use thiamine. This vitamin converts food into energy.
Riboflavin (Vitamin B₂)	Riboflavin is important for normal cell growth and activity. This vitamin supports growth and development and impacts skin, the lining of the digestive tract, blood cells, and brain function.
Vitamin B₆	Vitamin B ₆ supports normal brain development and is important for the nervous system and immune health.
Vitamin B₁₂	Vitamin B ₁₂ is required for proper brain function and development. It also plays a critical function in nerves, blood cells, and many other parts of the body. Vitamin B ₁₂ deficiency in infants causes lethargy, failure to thrive, irritability, and poor brain growth and development.
Niacin¹	Niacin aids the digestive system, skin, and nerves to function properly. Niacin is also important for converting food into energy.
Folic Acid	Folic acid helps your baby make healthy new cells and is critical to human health. For women, getting enough folic acid before and during pregnancy can prevent major birth defects of her baby's brain or spine.
Pantothenic Acid	Pantothenic acid is required for growth and helps the body metabolize—or break down and use food. It is also required for producing fatty acids and plays a role in the production of hormones and cholesterol.
Biotin²	Biotin is a component of enzymes in your baby's body that supports healthy metabolism. It is required for growth and producing fatty acids.
Vitamin C	Vitamin C helps tissue and bone grow and repair themselves. Vitamin C deficiency in infants causes lethargy, failure to thrive, irritability, and poor brain growth and development.



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Nutrients	Function
Vitamins	
Choline²	Choline is naturally present in breast milk and supports brain and eye development. It is also a neurotransmitter that supports cellular signaling; prenatal choline plays a role in hippocampal (memory) development.
Inositol²	Emerging research suggests inositol may play a role in brain development. Inositol is also abundant in colostrum (the first breast milk produced during pregnancy) and mature breast milk.
Minerals	
Calcium	Calcium is important for cellular signaling, protein stability, blood clotting, and muscle contraction.
Phosphorus	Phosphorus is important for cellular signaling, energy metabolism, and structural components other than bone, such as DNA and RNA.
Magnesium	Magnesium is a bone mineral component that plays a role in DNA and RNA protein synthesis, and cellular energy production. It also maintains cellular electrolytes and stabilizes membranes. Low magnesium is related to diabetes, heart disease, blood pressure, and osteoporosis.
Iron	Iron is critical to oxygen transport and is a co-factor for enzymes in energy generation and neurotransmitter synthesis. This mineral also supports immune-cell health. Iron deficiency is the most prevalent deficiency in toddlers worldwide; iron deficiency can cause irreversible impairments to cognition.
Zinc	A type 2 nutrient central to DNA, RNA and protein synthesis, zinc deficiency impairs growth, causes a loss of appetite, and is a major contributor to stunting growth worldwide.
Manganese	Manganese is required for normal growth and health. This mineral is a part of several enzymes and helps your body break down fats, carbohydrates, and proteins.



FORMULA

Nutrients	Function
Minerals	
Copper	Copper is a co-factor for oxidation in several human systems: cardiovascular; immune; and neurologic (brain development). Copper also plays a role in skeletal and skin integrity.
Iodine	Iodine is an essential component of thyroid hormones. After iron deficiency, iodine deficiency is the most prevalent among children. Deficiency or excess iodine causes goiter—thyroid gland excess growth—and cretinism, which is a condition of severely stunted physical and mental growth.
Sodium	Your baby requires some sodium because it supports nerve and muscle function. Sodium also helps maintain the right balance of fluids in the body.
Potassium	Potassium is a mineral and electrolyte that is essential for bodily function. When levels of potassium are not balanced, issues can occur, such as hyperkalemia and hypokalemia, muscle cramps, low blood pressure, and changes in heart rhythm. Potassium levels change with sodium levels to keep muscles working properly throughout your baby’s body, especially your baby’s heart. As sodium levels rise, potassium levels decrease. The reverse is true; as sodium levels decrease, the levels of potassium increase.
Chloride	Chloride aids with digestion and works with other electrolytes, such as sodium and potassium, to help maintain proper body fluids. Chloride also moves fluid in and out of cells in the body. If chloride levels drop, it can cause dehydration.
Selenium	Selenium plays a critical role in human metabolism. Selenium deficiency allows some viruses to be more potent.

*Not from human milk.

¹The generic term “niacin” includes niacin (nicotinic acid) and niacinamide (nicotinamide).

²Required only for non-milk-based infant formulas.

(b) Vitamin E shall be present at a level of at least 0.7 International Unit of vitamin E per gram of linoleic acid.

(c) Any vitamin K added shall be in the form of phyloquinone.

(d) Vitamin B6 shall be present at a level of at least 15 micrograms of vitamin B6 for each gram of protein in excess of 1.8 grams of protein per 100 kilocalories of infant formula in the form prepared for consumption as directed on the container.

(e) The ratio of calcium to phosphorus in infant formula in the form prepared for consumption as directed on the container shall be no less than 1.1 and not more than 2.0.

(f) Protein shall be present in an amount not to exceed 4.5 grams per 100 kilocalories regardless of quality, and not less than 1.8 grams per 100 kilocalories of infant formula in the form prepared for consumption as directed on the container when its biological quality is equivalent to or better than that of casein. If the biological quality of the protein is less than that of casein, the minimum amount of protein shall be increased proportionately to compensate for its lower biological quality. For example, an infant formula containing protein with a biological quality of 75 percent of casein shall contain at least 2.4 grams of protein (1.8/0.75). No protein with a biological quality less than 70 percent of casein shall be used. [50 FR 45108, Oct. 30, 1985, as amended at 80 FR 35841, June 23, 2015]



Formula

BUYING GUIDE

The infant-formula manufacturing industry is heavily regulated and manufacturers must comply with the requirements of the [Federal Food, Drug, and Cosmetic Act](#). The Food and Drug Administration (FDA) implements the regulations of the Infant Formula Act and has the authority to stipulate all requirements involving formula. These include: nutrient quality control procedures; records and reports; submission requirements; labeling; nutrient specifications; and current good manufacturing practices. The FDA routinely inspects all U.S. formula-manufacturing facilities. Currently there are four manufacturers in the United States: Abbott Nutrition, Mead Johnson Nutrition (Reckitt Benckiser), Gerber Products Company, and Perrigo Nutritional.

These manufacturers are registered with the FDA and market the following formulas in the United States:*

Abbott Nutrition, the maker of the nationally advertised brand **Similac**®

Mead Johnson Nutrition (Reckitt Benckiser) the maker of the nationally advertised brand **Enfamil**®

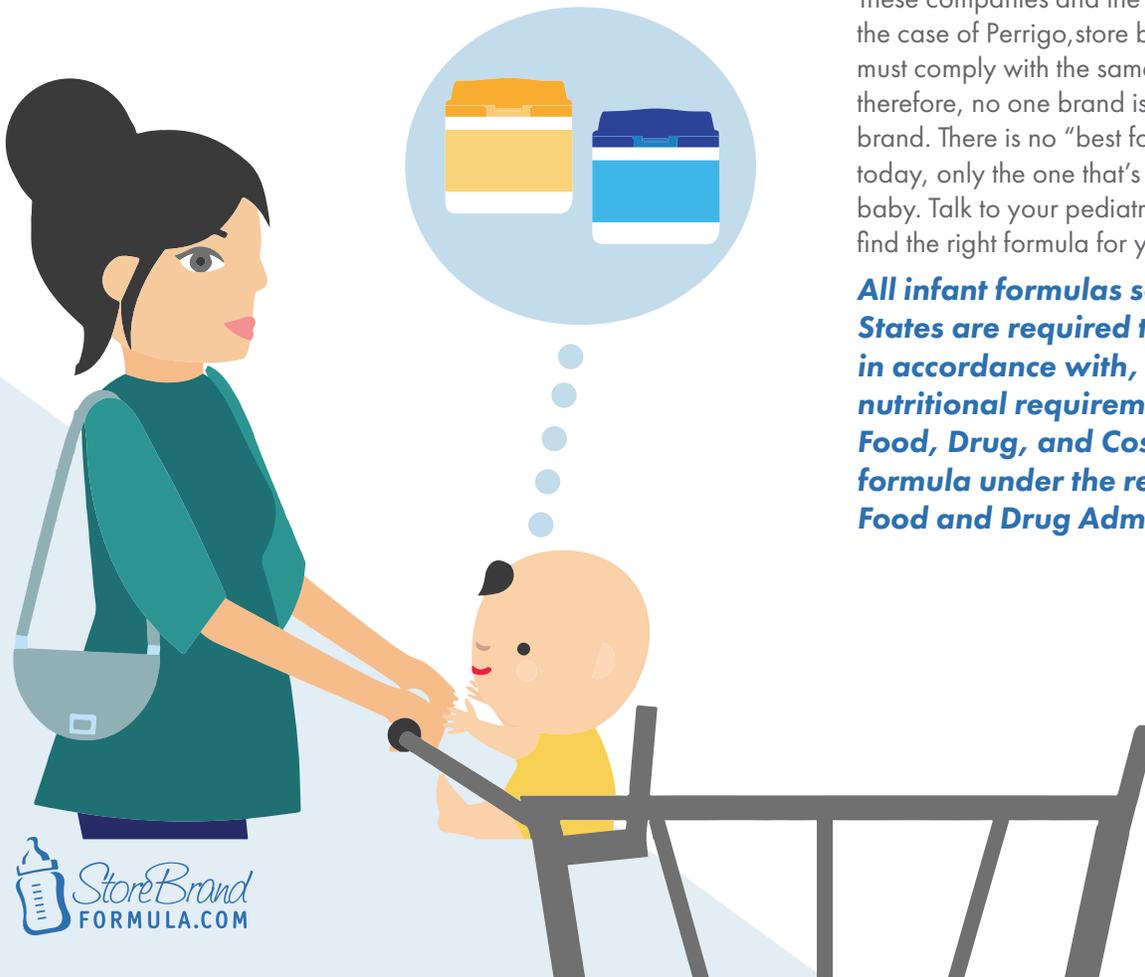
Gerber Products Company, the maker of the nationally advertised brand **Gerber**®

Perrigo Nutritional, the maker of **Store Brand Infant Formulas**

These companies and the formula brands or in the case of Perrigo, store brands they manufacture must comply with the same FDA regulations; therefore, no one brand is better than any other brand. There is no “best formula” on the market today, only the one that’s right for you and your baby. Talk to your pediatrician to make sure you find the right formula for your baby.

All infant formulas sold in the United States are required to be manufactured in accordance with, and meet the nutritional requirements of, the Federal Food, Drug, and Cosmetic Act for infant formula under the regulation of the U.S. Food and Drug Administration.

*Enfamil® is a registered trademark of Mead Johnson & Co.
Similac® is a registered trademark of Abbott Laboratories.
Gerber® is a registered trademark of Société des Produits Nestlé, S.A.
Store Brand Infant Formula is not made by or affiliated with Mead Johnson & Co., Abbott Laboratories, or Société des Produits Nestlé, S.A.





BUYING GUIDE

Types of Formula

Below is a chart identifying the types of infant formula available on the market today. This chart shows overall categories based on main protein ingredients, which is how most formulas are categorized.

Routine Formulas		
Type	Use	Protein
Cow's Milk-Based, Routine Infant Formulas	Appropriate for most normal healthy term infants who are not exclusively breastfed	Intact cow milk proteins (whey/casein)
Tolerance Infant Formulas	For otherwise healthy infants who may experience fussiness, discomfort, crying, spit up or gas	Partially hydrolyzed (partially broken down) cow milk proteins (whey and casein)
	For tolerance issues associated with intact or whole cow protein	Partially hydrolyzed protein formulas (partially hydrolyzed casein and intact whey)
	For tolerance issues associated with lactose	100 percent whey protein partially hydrolyzed
Soy-Based, Routine Infant Formulas	For healthy full-term infants with sensitivity to milk-based formula	Soy protein
	May be appropriate for infants with galactosemia or lactase deficiency	
	May be a vegetarian choice	

Courtesy of the Infant Nutrition Council of America



BUYING GUIDE

Types of Formula (cont.)

Below is a chart identifying the types of infant formula available on the market today. This chart shows overall categories based on main protein ingredients, which is how most formulas are categorized.

For Use With		
Type	Use	Protein
Hypoallergenic Infant Formulas	For infants with documented cow milk protein allergy or other food protein allergies	Extensively hydrolyzed or free-amino acid protein sources
Neonatal Intensive Care Unit (NICU) Infant Formulas	For premature infants or low birth weight infants; for use under medical supervision For premature infants after hospital discharge to help support “catch-up” growth; for use under medical supervision	Intact cow milk proteins (casein/whey) Partially hydrolyzed cow milk proteins (whey)
Special Medical Needs	Special formulas for metabolic diseases For infants with special dietary needs due to inborn errors of metabolism or enzyme deficiency; use under medical supervision	Intact cow milk proteins (casein/whey) Partially hydrolyzed cow milk proteins (whey)

Courtesy of the Infant Nutrition Council of America

Infant formulas are manufactured to meet exacting quality standards and—except for specialized metabolic formulas—contain all the nutrients needed to support the growth and development of newborn and young infants. Formulas must meet the levels of specific nutrients that are mandated by the federal law governing infant formulas. All ingredients in infant formula have been thoroughly tested and approved for use.



BUYING GUIDE

Three Forms: Powder, Concentrate, and Ready to Use

Baby formulas are available in three forms, depending on the brand and type of infant formula. Read the label and follow the exact mixing instructions on the package to make certain the product is prepared safely and correctly to provide all the nutrition your baby needs.

Powdered formula is the most economical and must be mixed with water.

Concentrated liquid formula must also be mixed with water.

Ready-to-use liquid formula is more expensive and does not need to be mixed with water.

Certified Organic and Non-GMO** Formulas

Some formula companies—including Perrigo Nutritional, the makers of store brand formulas—have introduced Certified Organic/USDA Organic and Non-GMO formulas for customers with those preferences. The following sections expand upon these two options.

Are Organic Formulas Non-GMO?

Yes. Organic formulas that meet U.S. Department of Agriculture’s (USDA) National Organic Program certification requirements do not contain genetically engineered ingredients. Federal law prohibits companies from labeling foods “100 percent Organic” or “Certified Organic/USDA Organic” if they contain genetically modified ingredients. However, Non-GMO infant formulas do not necessarily meet the USDA requirements for organic certification. If you prefer products that are Certified Organic, make certain to select products that are labeled according to the requirements of the [USDA National Organic Program](#).

What are GMOs?

The term genetically modified organism (GMO) is often used to describe a plant or animal that has been altered using genetic engineering to produce a desirable characteristic. This type of genetic engineering involves methods different from traditional breeding techniques. A few state governments, as well as many consumers nationwide, support laws that mandate labels disclose when a food product contains genetically engineered ingredients. A growing number of consumers also prefer products made without genetically engineered ingredients that include a “Non-GMO” statement on product labels.

Organic purchasing decisions for baby

Ranking of Key Messages Important to Mom	Organic	Non-GMO
1. No toxic, persistent pesticides		
2. No antibiotics or hormones for animals		
3. No artificial colors, flavors or preservatives		
4. Regulated by federal law		
5. No synthetic fertilizers		
6. No GMO ingredients		
7. Animals eat 100 percent organic feed and pasture		
8. Supports sustainable farming		
9. Protects wildlife and promotes biodiversity		
10. Enhances soil fertility		

**As used in this E-Book, Non-GMO means the ingredients were not genetically engineered.



BUYING GUIDE

What Does the Word “Non-GMO” Mean?

Leading medical and regulatory agencies, including the FDA, vigorously review genetically engineered ingredients and foods for safety. Genetically engineered food ingredients have safely been used in food production for more than 30 years.

Are Genetically Engineered Ingredients Safe?

When you read the word “Non-GMO” on a product label, it typically means the product is produced using ingredients that have not been genetically engineered. Although “GMO” means genetically modified organism, oftentimes it is not how the acronym is used by consumers in the United States. This is because “GMO” is often used to describe products that are manufactured without intentionally added organisms.

When it comes to “Non-GMO,” there is no universally applied standard in the industry. For example, Perrigo Nutrition, considers a formula to be “Non-GMO” if it uses ingredients from crops that do not have a genetically engineered version in the marketplace or, if an ingredient could come from a crop that has a genetically engineered version, that ingredient comes from the version of the crop that has not been genetically engineered. The company offers more information online at babyformula.com/non-gmo.

Speak with your Pediatrician

Always consult with your baby’s physician when choosing formula for your little one.





Switching FORMULAS

By Sandra Gordon

If your baby starts out on brand-name formula, don't feel you must be brand loyal for your baby's sake. As a savings strategy—up to 50 percent* savings—go ahead and switch from a nationally advertised brand formula to a store brand formula.

A clinical study by University of Virginia researchers, informally referred to as "the Switch Study," found that [switching formula](#) is safe and well tolerated in infants. In the study, babies who switched from an advertised brand milk-based formula to a store brand milk-based formula didn't experience an increase in spit up, burping, gas, crying or irritability, compared to babies who stayed with the pricier advertised brand.

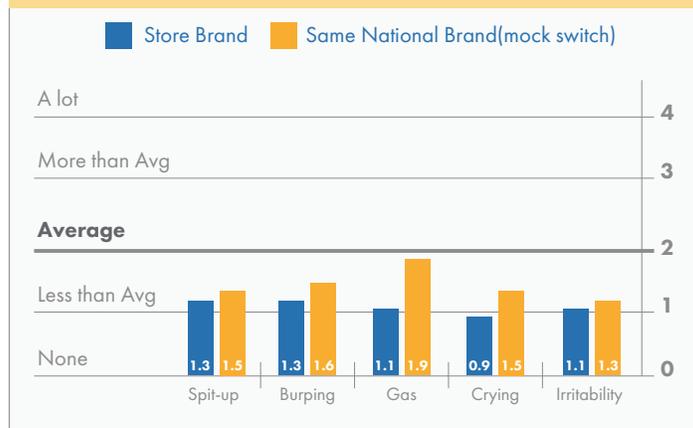
The blinded study (which means information about the test is hidden or "masked" from the participants in order to reduce or eliminate bias) involved 67 infants who were randomized in three groups according to the formula they were accustomed to being fed. The infants were then switched to a different brand of formula or the exact same control formula.

Each infant was observed during a four-day interval followed by a three-day transitional period when they were fed a different brand of formula or the control formula. During the transition, caregivers either switched each infant to the new brand or to the control formula and documented tolerance variables, such as burping, gas and crying.

University of Virginia Study Findings on Switching Formula

"Based on data in our study, **there is no statistically significant difference in tolerance** variables in changing a baby's formula," says James L. Sutphen, M.D., Ph.D., of the University of Virginia department of pediatrics and the study's lead researcher. "Switching baby formula brands is well tolerated, and we discovered there is no advantage to gradually switching versus immediately from one formula to another."

Perceived Tolerance Problems Among Infants Switched From National Brand to...



The Safety of Formula Switching for Infants, Cynthia M. Barber, Ph.D., Amanda Tusing, Lisa Kisamore, Beth Lawton, PNP**, Margaret Steele-Kosowitz, RN** and James Sutphen, M.D., Ph.D.** Perrigo Nutritionals **University of Virginia School of Medicine, Department of Pediatrics. Study revealed no statistically significant difference in tolerance variables if infants are switched to a new infant formula.

The study, funded by Perrigo Nutrition, showed formula tolerance, regardless of brand, is similar between standard, milk-based formulas in healthy, term infants. The milk-based formulas used in the study were Similac® Advance®, Enfamil® Infant, and Parent's Choice™, Walmart's store brand formula.**

* Comparison based on September 2018 price survey of Store Brand Infant Formula versus the leading advertised brands.

** Similac® and Advance® are registered trademarks of Abbott Laboratories. Enfamil® and Enfamil® Infant are registered trademarks of Mead Johnson & Co. Store Brand/Parent's Choice Infant Formula is neither made by nor affiliated with Abbott Laboratories or Reckitt Benckiser



Five Formula

MISTAKES TO AVOID

By Sandra Gordon

To save time, effort or money, these little habits can easily sneak into your baby's formula-feeding routine. Don't let them. They can put your baby's health at risk.

Infant Formula Faux Pas:

1. Putting an unfinished bottle of formula back in the refrigerator for another time. Harmful bacteria from your baby's saliva can travel through the nipple to the formula and multiply in the bottle, possibly making your baby sick.
2. Buying infant formula secondhand. No matter how cheap infant formula is on eBay, Craig's List, from online auctions or at a flea market, pass it up. You don't know what you're getting. The formula could be fine. Yet, counterfeit formula can be illegally relabeled to misrepresent its true content or quality, such as changing the "use by" date. It can happen in the secondhand market.

Instead:

Throw out unfinished infant formula and start fresh. If your baby is likely to consume less than a full bottle, you can pour the amount your baby typically doesn't eat into a clean bottle first and put that bottle in the refrigerator for later. Bottles of formula can keep in the fridge for up to two days. Keep track of freshness by labeling and dating bottles with time and date it was prepared. Instruct caregivers such as nannies, au pairs and grandparents to do the same.

Instead:

Buy store brand formula at mainstream retailers, such as **Walmart, Sam's Club, Target, Kroger, CVS, Walgreens, and Aldi.**





MISTAKES TO AVOID

3. Stretching infant formula by adding extra water. That's a **big no-no** because diluted formula won't meet your baby's nutritional needs and can cause water intoxication, which is potentially life threatening. No cost savings is worth that risk. Similarly, don't reduce your baby's feedings to save money either. Babies grow faster during their first year than at any other time of life. Reducing feedings can have serious health and developmental consequences.
5. Feeding your baby formula that's been lingering in a bottle in your diaper bag. Once formula is prepared, the clock starts ticking. If the formula hasn't been in the refrigerator or an insulated cooler, you've got an hour to feed it to your baby.

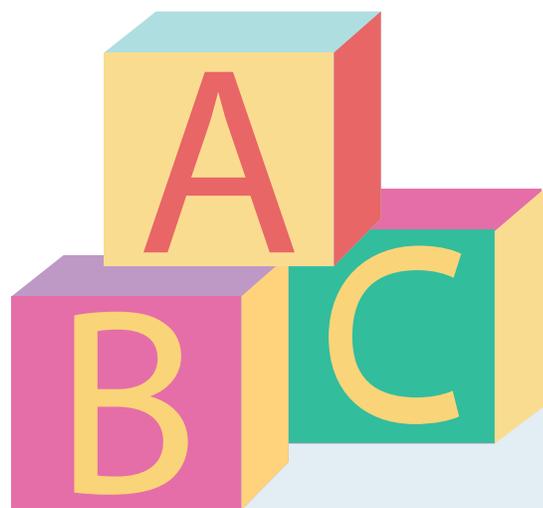
Instead:

Save by buying store brand formula to save up to 50 percent* compared to the cost of the advertised brands. Follow the preparation directions on the formula package exactly every time.

4. Buying formula in dented containers. Even if it's being sold at a deep discount, formula in a dented container isn't a good deal because structural damage to the package may allow air to enter, which causes formula to spoil and become unsafe for your baby to consume

Instead:

Inspect the packaging and put only perfect-looking packages of formula into your shopping cart.



* Total savings with Store Brand Infant Formula based on a price per fl oz comparison of Store Brand Infant Formulas and their comparable national brands. Retail prices are from an September 2018 retail price survey of assorted stores. Actual prices and savings may vary by store and location.



The dangers of **DILUTING FORMULA**

When Frugality Can Be Fatal

The average American family spends about \$12,000 on a new baby in the first year of the infant's life, and food represents the second-largest expense (after housing) in the total cost of raising a child, according to the United States Department of Agriculture. Given the high costs of child-rearing, it's understandable that parents look for ways to save, but sometimes thrift can be dangerous — especially if you're trying to save money by diluting your baby's formula or breastmilk.

Two-thirds of families that receive aid through the federal Women, Infants and Children (WIC) program run out of WIC-supplied baby formula toward the end of the month, and 27 percent add more water or less powder than recommended to their babies' formula, according to a study published in [Clinical Pediatrics](#). More than a quarter of low-income families report watering down formula or reducing the number of feedings, according to a study by Cincinnati Children's Hospital Medical Center. Unfortunately, many families don't understand how dangerous these practices are for the health and well-being of an infant.

"Formula diluting is one of those vital issues that isn't talked about enough," says Dr. Lisa Thornton, a specialist in pediatric rehabilitation and assistant professor in the departments of Pediatrics and Orthopedic Surgery at the University of Chicago's Pritzker School of Medicine. **"It's critical for new parents to understand the serious harm this can cause to their baby."**

Infant formula is specifically designed to meet the exact nutritional needs of babies, so altering the formulation—**by adding more water or less powder than prescribed in the manufacturer's mixing instructions—creates an imbalance in the nutrition provided by the formula.** Babies need the calories and nutrition found in formula and breast milk, and water has none. Diluting the mixture may mean your baby doesn't get the essential vitamins and minerals he or she needs to grow and develop normally. Weight loss, developmental delays and even death can occur if parents opt to dilute their baby's food source.



DILUTING FORMULA

In fact, most pediatricians recommend that babies not be given only water to drink until they are at least 6 months old. Babies who get too much water can develop “water intoxication,” and become groggy, confused, drowsy, twitchy or even suffer from seizures. Over the years, news stories have emerged warning of the dangers of diluting formula and breast milk. Most recently, a Georgia couple faces criminal charges in their baby’s death. Authorities say that watering down breast milk caused the newborn’s electrolyte and sodium levels to fall, leading to brain swelling and death.

“I encourage moms to talk to their pediatrician. Their pediatrician can review formula preparation guidelines and discuss additional options for mom, including using store brand formula, which has the same nutritional value as name brands, but generally costs 50 percent less,” Thornton says.

If you fear that only name brand formula is good enough for your baby, you’re not alone; half of caregivers wrongly believe that store brand formulas and name brand options are not nutritionally comparable, and less than a quarter say they would use store brand, according to a study published in *Clinical Pediatrics*.

Research shows that name brand formula offers no clear benefits over far less expensive store brand formulas, nor do babies have any problem tolerating the switch from a name brand to a store brand. Switching to store brand formula can save a family up to \$600 per year, and the store brand formulas,

like those offered by Perrigo Nutritional, are available in varieties that address common feeding issues, like reduced or low lactose, soy-based and specialty formulas.

“The Food and Drug Administration strictly regulates all infant formula, both store brand and name brand, so that they meet the nutritional needs of infants,” says Thornton.

“Moms can feel secure knowing that the same stringent guidelines for quality and safety must be met by all infant formula manufacturers.”



PART TWO

Tips For You and Your Baby's First Year



Starting Solids:

WHAT TO FEED BABY AND WHEN

By Elizabeth M. Ward, M.S., R.D.

Soon it will be time to feed your child more than breast milk or infant formula. By any measure, adding solid foods is an exciting milestone for babies and their parents. Here are some “how-to” recommendations for feeding baby, including what to offer and when.

Developmental Matters

The [American Academy of Pediatrics](#) (AAP) suggests starting so-called complementary foods—foods other than breast milk or infant formula—at about six months of age. By this time, most infants will have reached the developmental milestones that enable them to safely eat baby foods such as infant cereal, pureed meat, fruits, and vegetables.

It’s important to understand how an infant’s development influences their eating during the first year. (Your child’s progress towards a diet with more complementary foods may be different, so ask your pediatrician what’s right for your baby.) Here are some general guidelines to consider.

Before four months of age, your child’s kidney and digestive system are not mature enough to handle any foods except breast milk and infant formula. That’s why you should never add infant cereal to your child’s baby bottle.

Around six months of age, babies can sit up with support and hold up their head for short periods of time. A child can lean towards food and away from it when he or she is not interested in eating.

By six months, “as your child grows older their nutrient needs increase and solid foods are added to the breast milk or infant formula feeding diet to meet these needs.”
-CDC.gov

Between six and nine months of age, your baby can safely eat semi-solid foods, such as mashed banana, and by eight months, he or she will start chewing and swallowing more solid foods.

Between age nine and 12 months, babies begin to feed themselves, drink from a sippy cup and begin eating bite-sized pieces of the same healthy foods the family is eating.

How to know when your child is ready to eat complementary foods

Many signs point to a child’s readiness for complementary foods, including his or her interest in what you and other family members are eating. Other important signals may include if your child:

- Opens his or her mouth when presented with food
- Can receive food from a baby spoon and doesn’t thrust the utensil out with his or her tongue
- Can move foods from the front of his or her mouth to the back
- Has doubled his or her birth weight and weighs at least 13 pounds



STARTING SOLIDS

Baby, let's eat!

You and your baby are ready to move on to complementary foods. First foods should be pureed or quite runny, such as infant cereal mixed with breast milk or infant formula. Start with iron-rich foods, such as iron-fortified infant cereal or pureed meat. Then, introduce fruits and vegetables in any order.

Aim for three meals a day, as you start to build a more structured feeding schedule and to integrate baby into family mealtimes. He or she probably won't eat much at first because part of the process for baby is becoming accustomed to the experience of sitting up and taking food from a spoon. The spoon should be small and shallow with no hard edges or it should be coated in plastic.

When you begin complementary foods, breast milk or infant formula will dominate your baby's diet. As time goes on, he or she will rely more and more on complementary foods.

Don't worry if baby doesn't eat all that you think he or she should. Young children know when they've had enough food, or need more. Pay attention to your child's hunger cues, and allow him or her to alert you when he or she is done eating.

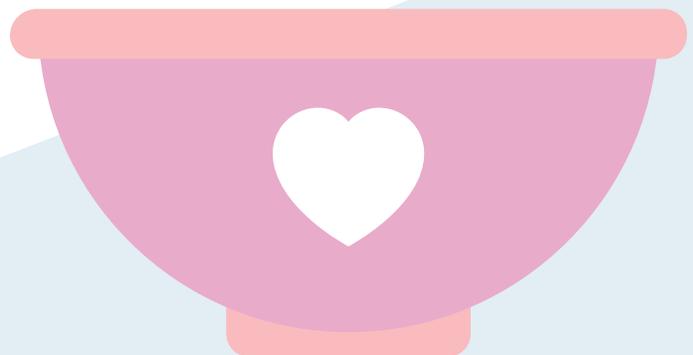
What foods to avoid

Experts recommend introducing foods one at a time to see if there is any allergic reaction, and waiting a few days before adding another new food. There's no need to be overly concerned about food allergy, however.

According to the AAP, there is no research supporting delaying feeding infants foods that, in the past, have been thought of as highly allergenic, including fish, eggs, and peanuts. In addition, says the AAP, there is no convincing evidence that waiting to introduce complementary foods beyond six months lowers the risk of food allergy. Of course, if your baby has a reaction to any food, remove it from his or her diet immediately and call the doctor right away.

Infants should not have honey because they are at greater risk for food poisoning from it, should it be contaminated with the bacteria that causes botulism.

Don't make cow's milk your child's primary drink until after your child's first birthday. Cow's milk is low in iron and consuming too much may result in iron deficiency. As for other beverages, limit daily juice intake to four to six ounces, and don't give baby juice before six months of age. Take care to prevent choking. Never leave an infant unattended or guarded by an older child. Certain foods are more prone to cause choking because they can block a child's small airway. They include: whole nuts and seeds, raw carrots and celery, large chunks of cheese, meat, and poultry, and hot dogs cut into coin-shaped pieces.





Tips For Taking Baby Formula ON THE GO

By Michelle LaRowe

Whether you're venturing out for the day or heading out for a few hours, you'll want to make certain you're prepared to feed your baby whenever and wherever he or she sees fit. If you feed your baby formula, be sure you're prepared to feed on the go. Consider these key tips for the mobile mom.



Invest in a washable diaper bag.

Whoever said, "Don't cry over spilled milk," has never had a pool of leftover infant formula from a leaky baby bottle at the bottom of their designer diaper bag. When it comes to diaper bags, practicality reins king. **Choose a bag that can be tossed into the washing machine or one that can be completely wiped down after a formula spill.**



Always pack extra infant formula.

You never know when you're going to get stuck in traffic or when a doctor's visit is going to go much longer than expected. Add a crying, hungry baby to an already stressful situation and voila: you have the perfect recipe for a mommy meltdown. **Always bring extra water, powdered baby formula, diapers, wipes, burp clothes and a change of clothes; you'll be prepared for any type of situation.**

Avoid overpriced options.

It can be tempting to purchase single-serve tubes of powdered formula or individual servings of ready-to-use liquid infant formula, but don't. These solutions are short-lived and overpriced. Individual serving solutions are typically prepared in four-ounce servings for formula-fed babies. **If your baby typically eats more than that, you can end up spending a small fortune per feeding or wasting a substantial amount of unused formula because it can't be prepared in two-ounce servings.**



ON THE GO

Pick up a formula dispenser.

For less than four bucks, you can purchase a reusable, divided canister that will hold premeasured amounts formula. In each compartment, add the appropriate scoops of formula for your baby's feeding amount; in your baby's bottle, add the appropriate amount of water. When you're out and about, simply open the dispenser and pour it into the premeasured, water-filled bottle for quick and easy bottle preparation.

Be formula-preparation savvy.

If your baby only drinks warmed formula, consider heating water, adding it to a small thermos, and bringing it with you to avoid having to warm formula on the go. Alternatively, place warm water in a bottle and store the bottle in an isolated bag. **If you're not going to have access to a sink for bottle cleaning or if packing-space is limited, consider using bottles with disposable liners and packing extra nipples and rings.**



Brush up on bottle — feeding safety.

If you'll be away less than two hours, make bottles in advance and store them in an insulated cooler with ice packs. If you'll be away for more than two hours, prepare bottles as needed. And remember, if a previously chilled bottle of formula is left out for more than an hour, you'll need to toss it. It's also important to remember that once your baby starts feeding from a bottle, uneaten formula can't be saved for later use. Discarding excess formula is important in preventing the growth of bacteria that can occur from contact with your baby's saliva.

While it can be tempting to take shortcuts to save time and money, shortcuts aren't allowed when it comes to feeding baby. If you're feeling pressured to stretch your formula further by saving uneaten formula for later or increasing the amount of water you add to your baby's bottle, don't. The health consequences aren't worth it. Instead, consider smart ways to save by avoiding high-priced, single-serving solutions and by opting for store brand infant formulas. Visit this online [savings calculator](#) to learn how much money you can save by choosing a store brand formula.



Budgeting For Baby:

THE FIRST SIX MONTHS

By Kaitlin Krull

Welcoming your first bundle of joy into the world is an exciting and memorable time in a new parent's life. Of course, it's also an expensive time. The most recent [USDA figures](#) estimate that the average middle-income family will spend more than \$12,000 during the first year of their child's life. Most of these costs are likely to be incurred in the first half of that year, as parents set up their homes for the new baby and make larger, one-time purchases. If you are like us at [Modernize](#) and you find these baby costs more than a little daunting, why not take a look at these tips for budgeting for a baby during the first six months.

Nursery

Kitting out the nursery is one of the biggest initial costs when you're anticipating the arrival of your baby. However, if you shop smart, it is possible to save money and buy quality products that will last long past the first six months. As far as cribs are concerned, buy a convertible crib that can be lowered gradually and then turned into a toddler bed. A changing station, place for clothes storage, and a rocker or armchair for nighttime feedings are a must, but save money on repurposed furniture or buy matching furniture at reduced prices. If your baby will sleep in your room at first, shop around for the best deals on bassinets and co-sleepers. When budgeting for a baby, check local Facebook buying and selling pages to get any secondhand furniture, but remember to always buy new mattresses.

Nursery decor and accessories can cost you as much or as little as you want, but remember that your baby is likely to spend relatively little time in the nursery for the first few months. If you have to, save the cash until later on and focus on the first six months' priorities. When you do stock up for your nursery, add crib sheets, bumpers (make sure they are breathable), diaper holders, a mobile, and a baby monitor to your list. Remember that smart shopping now means spending less money in the future.





BUDGETING FOR BABY

Feeding

Feeding prices over the first six months vary, depending on whether you've chosen to breastfeed or formula feed your baby, or a combination of both. For breastfeeding families, the cost here can be as little as a pack or two of breast pads, nipple shields, and nursing bras. If you choose to pump as well, add in the cost of a breast pump (electric options are more expensive than manual, but check and see if your healthcare provider offers rentals or if your insurance covers the cost of one), bottles, and milk storage bags. Formula feeders also incur bottle and sterilization accessory costs, but the primary cost here is formula itself.

Prices vary wildly, but if you're looking to save money when budgeting for a baby, buy a store brand like Walmart's Parent's Choice brand. Store brand formulas meet all the same FDA nutrition requirements and are clinically proven to be as well tolerated by babies as other leading brands.* By switching to store brand formula, you can save up to \$600 per year without compromising quality.**

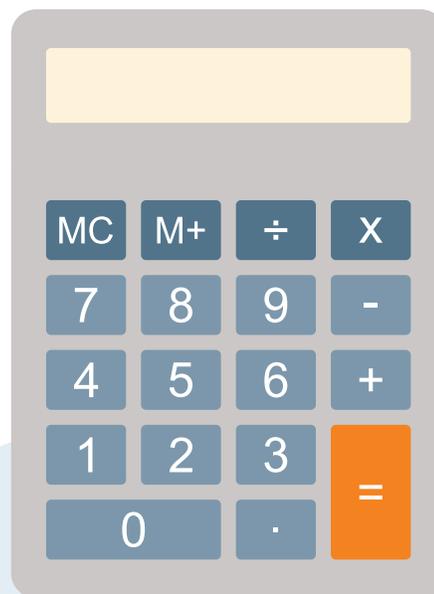
Clothing and Accessories

If you know the gender of your baby before birth, you can get most of your clothes shopping out of the way well ahead of time. Just remember that even the smallest parents can make very big babies, so don't spend too much of your money on tiny baby or even newborn sizes. This is a key trick when budgeting for a baby. Buy the basics and leave it to friends and family to gift you statement pieces.

If you do feel as if you can't stretch to buying an entire baby wardrobe, hand-me-downs are nothing to stick your nose up at. Preloved clothing, blankets, burp cloths, and bibs handed down by friends, siblings, or bought at consignment shops are just as good as brand-new items if they've been washed and cared for.

Changing and Bathing

During the first few months, babies go through an extraordinary amount of dirty diapers. Save money with store brand disposables and wipes if baby's body tolerates them well. You can also help the environment by switching to cloth diapers after the first month or so. The initial outlay here can be large, but there are plenty of places that offer free or reduced-price cloth diapers and inserts; if you check around you are sure to find an affordable deal. Stock up your bathroom with an infant bath (used is just as good as new), towels, washcloths and sponges, and baby toiletries.



* Studied before the addition of prebiotics.

** Total savings with Store Brand Infant Formula based on a price per fl oz comparison of Store Brand Infant Formulas and their comparable national brands. Retail prices are from an September 2018 retail price survey of assorted stores. Actual prices and savings may vary by store and location.



BUDGETING FOR BABY

Transportation

Most parents have heard that new car seats are a must, but if you're new to the game, know that it is imperative you buy a new car seat for your new arrival. Used models may look great, but you never know where they've been and whether they are safe to use. You can, however, cut costs with cheaper umbrella strollers or make a forward-looking investment with a stroller that converts to a double. Baby carriers and diaper bags are essentials, but if you buy quality items at the beginning, they will last much longer.

Playtime

Newborn babies have very little need for expensive, trendy toys, and are happiest cuddling and playing with loved ones. If you feel the need for accessories, a play mat and baby chair (Boppy or Bumbo) will be practical and fun a few months down the line. In the meantime, anything soft with bold black-and-white prints will fill your baby's need for stimulation.

Childcare

Calculating childcare costs is another topic in and of itself when budgeting for a baby, but if you are planning to return to work soon after your baby's birth, it is a necessary part of your budget. Discuss your options with family and friends before contacting daycare providers and nannies, but know that prices for such providers vary wildly depending on services offered and a variety of other factors.



15 Tips For

STAYING ORGANIZED

You Can Still Get Through Your To-Do List Now That Your Baby's on Board.

Here's How

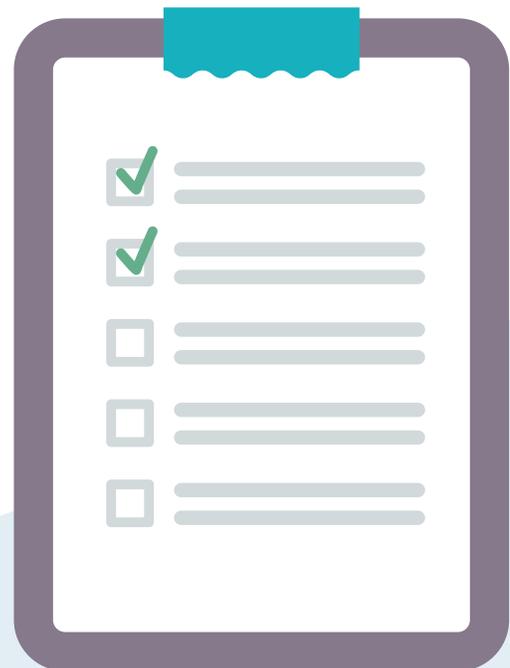
If you are getting through the day with the family all fed, clothed, and relatively clean, you are doing a wonderful job as a new parent. Still, you probably feel that your life is a bit more hectic than you'd like it to be. To the rescue: 15 tips for keeping chaos to a minimum—and happiness to the max.

- 1. Always keep your diaper bag packed with a clean bottle and nipple, pacifier, formula, four to five diapers, and plenty of wipes (keep them in a Ziploc bag), and an outfit change and sweater for the baby. This way you know you can grab the bag and go at any time. Re-stock after every outing.**
2. Buy two inexpensive dishwasher baskets for bottle shields, nipples, and breast-pump parts. One you'll keep by the sink for the to-be-washed items; the other goes right from the dishwasher into your cupboard.
3. In a large lightweight pitcher, mix up all the formula you'll need for the day. When your baby cries for her bottle, all you'll have to do is pour it into a bottle and warm it up.
4. If you're pumping regularly, consider buying a bra that lets you pump hands-free. Now you can talk on the phone, answer email and otherwise multitask while you're filling bottles with milk.
5. Write your grocery list items under two columns: "essentials" and "other." That way if a meltdown threatens, you can skip out of the store ASAP without worrying you'll run out of toilet paper.
6. And speaking of shopping, scope out which malls have nice family bathrooms and spaces for nursing and bottle-feeding moms. You'll be likelier to get your chores done if you know the trip will be as pleasant as possible.
7. Figure out one place, and one place only, to keep your house and car keys. Hanging them on a peg near your home's entryway is one good option. Think about it: You only have a small window of time between your child's naps to get out and about. If you spend 20 minutes in a frantic search for keys, that window starts to close.
8. Never buy another item of clothing that requires ironing.



STAYING ORGANIZED

9. For that matter, give up folding underwear, infant t-shirts, and anything else that doesn't really need it. If you're having a rough week, don't even worry about putting clothes away. Just take clean duds right from the laundry basket.
10. To cut down on clutter, switch to paying your bills online. To cut back even further, go to [OptOutPreScreen.com](https://www.optoutprescreen.com) to take your name off any mailing list used by the major credit agencies.
11. Does it seem like you just don't have enough time in the day to get everything done? Join the (parents') club. What chores can you delegate, and how? Would a nearby grandparent grocery shop for you? Would the teenager next door help with lawn care for a little money each week?
12. If you're back at work, use your lunch hour to get errands done. If this is one of your only opportunities for adult interaction, ask your work pal if she'd mind tagging along on your trip to the drugstore.
13. Take advantage of the free delivery services offered by most grocery stores, dry cleaners, and more.
14. Get two big plastic bins and label one "out" and the other one "in." Your in-box is for all the little tasks you need to get to, such as the socks that need mending or the insurance claims you need to fill out. When you have 5 or 10 minutes, you can go to the bin and get something done. In the out-box, put books that need to be taken back to the library, the six identical baby gifts you need to return, and so on. This organizational scheme is so easy you're likely to stick to it.
15. Finally, resolve that your answer to a friend's question of "Can I help?" is never again going to be "No thanks, I can manage". Starting today, your answer will be, "Yes, thanks!"





Tips For Traveling With Baby

DURING THE HOLIDAYS

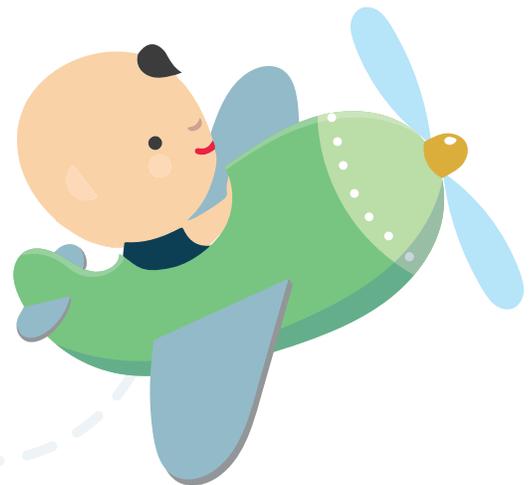
By Sandra Gordon

Traveling with a little one can be stressful, especially during the Thanksgiving and Christmas holiday seasons. Whether you're road tripping it to Grandpa and Grandma's or getting your passports stamped, traveling with baby is always a big adventure. The trick is to be prepared so that you can enjoy the journey—and the destination. No matter where you're going or how you're getting there, these expert tips for traveling with a baby during the holidays can help make life a little easier and the trip more pleasurable.

Betty N. Thesky, author of [Betty in the Sky with a Suitcase: Hilarious Stories of Air Travel by the World's Favorite Flight Attendant](#), made the ultimate mistake when she packed all of her baby's diapers in her checked bag. "I had to walk around the plane and ask other parents for a spare diaper," she said. "There were no other babies on board that day so I improvised by putting two holes in a pillowcase with a Kotex down the center." So, make sure to pack these items in your diaper bag.

Be a diaper bag overachiever.

When you're traveling, your diaper bag becomes your mobile kitchen, changing table and entertainment center more than ever. Always think worst-case scenario; pack everything your baby might need, even if it's just a short trip. Pack extra diapers, a travel pack or two of wipes, a change or two of clothes, an extra shirt for you (radar: spit-up, spills), snacks, toys, extra pacifiers, feeding supplies, and baby formula that is ready to go.





TIPS FOR TRAVELING

Have baby formula at the ready.

Bring a prepared bottle of baby formula for the airport; this can really help keep your baby happy during the lengthy check-in process. Airports allow you to take more than 3.4 ounces of infant formula or breast milk through airport security. It will be screened by X-ray, but you can simply tell the transportation security officer that you have medically necessary liquids at the beginning of the checkpoint screening process. Visit the [Transportation Security Administration \(TSA\) website](https://www.tsa.gov) for more information on flying with children.

In your diaper bag, stow two to four bottles of pre-measured, dry baby formula that you can mix with bottled water at feeding time and make to-go (dry) formula bottles before going out for the day. Pack extra formula in your carry-on (a diaper bag doesn't count as your carry-on) and checked bag or buy more formula wherever you land.

Thrift tip: Buying store brand infant formula instead of Enfamil®, Similac®, or Gerber® brands will save you a great deal of money.* Store brands and advertised brands are regulated by the U.S. Food and Drug Administration and meet the same standards. Visit your favorite stores—Walmart, Sam's Club, Target, Kroger, or any other retail, grocery, or drug stores that you like—and buy the "house brand." You will save money and won't compromise quality.**

Take the pressure off.

"Give your baby a bottle during take-off and landing," Thesky added. Sucking on something, such as a bottle or pacifier, will help relieve ear pressure.

Stick to your baby's schedule.

This strategy worked for Martie Adamsen on a cross-country flight with her 18-month-old, Meghan. "I kept her West-Coast schedule, says Adamsen. "On the plane, we went from activity to activity. Then, during her regularly scheduled naptime, I kept to her routine—getting her cozy in her favorite blanket, having her drink some milk, then singing her favorite lullaby—and she went right to sleep."



* Enfamil® is a registered trademark of Mead Johnson & Co. Similac® is a registered trademark of Abbott Laboratories. Gerber® is a registered trademark of Société des Produits Nestlé, S.A. Store Brand Infant Formula is not made by or affiliated with Mead Johnson & Co., Abbott Laboratories, or Société des Produits Nestlé, S.A.

** Comparison based on September 2018 price survey of Store Brand Infant Formula versus the leading advertised brands.



How To Return To

WORK AFTER BABY

By Michelle LaRowe

According to a recent survey conducted online by Harris Interactive, nearly 75 percent of American moms plan to return to work post baby, and there are several stress factors associated with doing so.

If you don't take care of yourself, you can't take care of anyone else. Set your alarm 15 minutes before everyone else to have your coffee in peace. If you can't hit the gym, take a brisk walk during your lunch break. If you aren't meeting your needs you won't be able to meet the needs of others.

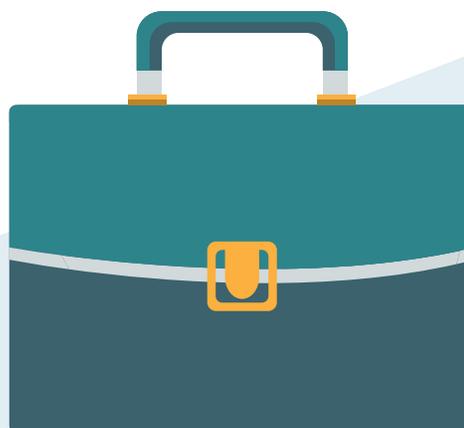
Guilt is mommyversal. Whether you are a working mom, stay-at-home mom, or work-from-home mom, guilt is mommyversal. Just because you feel guilty doesn't mean you are. If you've made the right choice for your family, do yourself and your baby a favor—let go of the guilt.

A montourage is a necessity. Now is the time to find out who and what can make your life easier (especially childcare you can trust). Whether outsourcing the pet walking or ordering groceries online, find dependable ways to give you more time in your day to spend with your family

Going Back to Work after Baby

According to the survey, 42 percent of moms returning to work are stressed about feeding their baby. One way you can help prepare for your return to the office is by putting together a feeding plan for your little one. While experts agree on the benefits of breastfeeding, some moms have found it is easier to supplement breast feeding with baby formula when returning to the workforce.

Speaking of guilt, don't let higher costs fool you—it's ok to save when comparable store brands are available. Although formula can be pricey, store brands cost up to 50 percent less than the big brands; this can save you up to \$600 annually (possibly enough to cover that dog walker)!* Top-selling store brands, such as Walmart's [Parent's Choice™](#) and Target's up & up® formulas, are nutritionally comparable to advertised brands and regulated in the same fashion.



* Retail prices are from a September 2018 retail price survey of national retail stores. Actual prices and savings may vary by store and location.

Author

BIOGRAPHIES

Sandra Gordon

Author and Consumer Savings Expert



Sandra Gordon writes frequently about baby products, saving money, health and nutrition for books, leading consumer magazines and websites, including ShopSmartmag.org, Productopia.com, *Parents*, *Vitality*, *Prevention*, *Family Circle*, *American Profile* and *Harvard Medical School*. She has appeared on NBC's Today Show and as a baby-safety expert on The Discovery Health Channel's "Make Room for Baby." She lives in Connecticut with her husband and their two daughters. She is the author of nine books, including *Consumer Reports Best Baby Products* (the 8th, 9th and 10th editions) and *Save a Bundle: 50+ Ways to Save Big on Baby Gear*.

Kaitlin Krull

Author



Kaitlin Krull is a writer and mom of two girls living the expat life in the United Kingdom. Her writing is featured on *Modernize.com* and many home decor sites around the web. She can also be found blogging from time to time on her personal blog, *A Vicar's Wife*.

Author

BIOGRAPHIES

Michelle LaRowe

Author, Nanny, and Working-Mom Expert



Michelle is the 2004 International Nanny Association Nanny of the Year. A career nanny specializing in caring for twins, Michelle has been partnering with parents in raising their children since 1994.

Although she holds a bachelor of science degree in chemistry and a certificate in pastoral studies, she has enjoyed her work as a professional nanny and now as an industry expert, parenting author, and consultant.

Michelle is an active member of the nanny community and has served on the board of directors and as vice president of the International Nanny Association. She currently serves as editor-in-chief of Longhorn Leads, parent company of eNannySource.com and as the executive director of their award-winning nanny placement agency, Morningside Nannies. Michelle is called on by the media as a parenting expert and has appeared on local, national and international television and radio, and has been featured in print. She is also a national speaker, bringing a message of hope and empowerment to mom groups across the nation.

Michelle is the author of the *Nanny to the Rescue!* parenting series, *Working Mom's 411*, and *A Mom's Ultimate Book of Lists*. She and her husband Jeff reside on Cape Cod with their daughter Abigail and son Luke.

Lisa Thornton, MD

Pediatrician and Infant Nutrition Expert



Dr. Lisa Thornton is a mom and a pediatrician who specializes in the care of children with disabilities. She is passionate about providing reliable health information for families and believes that childhood is the best time to develop good habits for the body and mind. Dr. Lisa has practiced medicine in a busy clinical setting for more than 18 years, has lectured widely, and provides health commentary for network morning shows and various other media outlets. Her friendly, engaging, straightforward style makes health information accessible whether she's talking to a private patient or a network audience. Aside from raising her own children, Dr. Lisa's next greatest passion is partnering with parents to help them guide their children to the best life possible.

Author

BIOGRAPHIES

Lisa Thornton, MD

Pediatrician and Infant Nutrition Expert

Dr. Lisa is the founder and director of C.A.M.P. Schwab (Children with Adapted Mobility Play), whose mission is to encourage athletic participation among children with disabilities. She has lectured at academic institutions (Fisk University, Northwestern University, Tulane University, University of Chicago), corporations (Boeing, Kraft Foods, National Association for Black Journalists, Safeway, The Leeza Gibbons Memory Foundation), and for the Michigan Legislature. She has led audiences to a greater understanding of a variety of topics including childhood obesity, childhood disability, injury prevention, and overall health and wellness. Dr. Lisa is a graduate of the University of Michigan Medical School and completed her residency at Children's Memorial Hospital Northwestern University.

Elizabeth Ward, MS, RD

Author and Registered Dietitian



Elizabeth Ward is a registered dietitian, freelance writer, and mother of three. Her latest book is *MyPlate for Moms, How to Feed Yourself & Your Family Better: Decoding the Dietary Guidelines for Your Real Life*. Ward is also the author of *Expect The Best: Your Guide to Healthy Eating Before, During, & After Pregnancy*, and *The Complete Idiot's Guide to Feeding Your Baby and Toddler*. Ward is a contributing writer for *Men's Fitness* magazine, *Muscle & Fitness Hers*, and *WebMD*.

As a spokesperson for the American Dietetic Association for nearly 10 years, Ward was featured in nearly 1,000 print and broadcast interviews, including CNN, U.S. News & World Report, *The New York Times*, and *The Boston Globe*. She has also been a guest on *The Today Show* and *The Dr. Oz Show* and regularly appears live on the *Morning News* on Fox 25 in Boston.

Ward created and conducted corporate nutrition education programs for five years at Medical Care Affiliates in Boston, where she also counseled patients. She has worked at the Joslin Diabetes Center and the American Heart Association, and for seven years counseled children and adults about healthy eating and disease prevention at Harvard Vanguard Medical Associates in Boston.