

Powdered Infant Formulas and Baby's First Foods

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A baby's body will develop and grow more in the first three years of their life than in all their remaining years. Thus, what a child ingests during these highly developmental years is of paramount importance.

There never will be a question whether breastfeeding is best for a baby. A mother's milk is nature's perfect and complete food for her baby and can't be reproduced. There are 400 nutrients known to be in breast milk that are unable to be replicated and are not in substitutes such as powdered infant formula (PIF). Yet the fact remains that there will be times when breastfeeding is not an option and mothers will need to supplement. In this instance, it's important for parents to have all of the facts.

The Contamination Factor

The World Health Organization (WHO) recently developed new guidelines for reconstituting PIF. WHO recommends that water should be boiled first, cooled to 158 F (70 C) and then used to reconstitute the formula at that temperature. Higher temperatures were found to cause problems with the formula and lower temperatures were not able to kill the bacteria present.

Enterobacter sakazakii is a bacterium that causes rare but severe infections associated with meningitis, necrotizing enterocolitis and sepsis in infants, with meningitis being the most frequently reported clinical symptom in neonatal *E. sakazakii* infections. Infants who developed meningitis were generally less than one week of age when they contracted the illness and were typically healthy until that point. After the onset of the symptoms, they would frequently develop complications including seizures and brain abscesses, with a 40 percent chance of mortality.

It has been determined through recent studies that reconstituted PIF is the source of several cases of these illnesses. The new guidelines developed for reconstituting PIFs advise not to sterilize the water, but water is not the problem; it's the formula that is contaminated.

"When you say 'not breastfeeding is risky,' what you're really saying is 'using infant formula is risky,' and that is true and [the formula manufacturers] know it," said Dr. Jay Gordon, a pediatrician in Santa Monica, Calif., and member of the breastfeeding committee of the American Academy of Pediatrics.

Healthier Formula Options

While there is no way to recreate a mother's milk, it is possible to improve on the standard formulas available by adding necessary nutrients that are lacking. For instance, most infant formulas are lacking a key nutritional component: fatty acid. With today's "anti-fat" message being so prevalent, most people aren't aware of its critical importance. Considering the fact that the brain is 60 percent lipid (fat), this is an important part of a newborn's diet.

For an infant to remain as healthy as possible, it's important for them to obtain a proper balance of essential fats. While this is very difficult, it's not impossible to follow a "fat-fortification protocol," as offered by Dr. Joseph Mercola, the author of the Total Health Program. Dr. Mercola recommends adding the following to an infant's diet:

- Cod liver oil: one cc per 10 pounds of body weight.
- Organic egg yolk: one daily, added at 4 months of age.
- Organic cream, ideally non-pasteurized and non-homogenized. (Note: If you are unable to find a local dairy farmer who will cooperate with you, please try this link: www.realmilk.com/where.html.)
- Omega nutrition: pure sesame, walnut, safflower and sunflower oils (rotate with above): 1 teaspoon daily.
- High-quality coconut oil: 1 teaspoon. (Note: This oil needs to be heated to 76 degrees F to become a liquid.)

Recognize that breastfeeding always is best for the infant, but if not possible, make sure parents understand they should do everything possible to provide a healthier formula by adding proper supplementation. Referring your parents to a holistic nutritionist also might be an option.

Supplementing and Introducing Solids

A common concern among new moms is that their baby isn't getting enough nutrition. It is very normal for a newborn to feed every two hours. However, this doesn't mean they aren't getting enough "food" with each feeding; it simply means they require frequency for their growth.

One of the worst things to do to an infant's digestive system is to introduce solids too soon. This may cause future food allergies, as well as overtax their digestive tract and cause them to become "gassy" or "colicky." Many parents, on the advice of family members and even pediatricians, have chosen to add "baby cereal" to the infant's formula or even mix it with expressed breast milk to give the baby a "full tummy," so they can "sleep through the night." Introducing solids before a baby is ready might cause more serious issues than lack of sleep.

When to introduce solid foods is determined best by the maturity of the digestive system and should never start with "baby cereal." Many authorities discourage grains until a child is at least one year old. It should be further noted that when a baby has a full set of teeth, saliva secretion increases, which is essential for digesting carbohydrates. Until then, a baby might have problems digesting carbohydrates, causing gas and colic.

Gerber, Heinz, Beech Nut or What?

Baby food has become a \$1.25-billion-a-year industry in the U.S. and Canada. The average parent believes the boastings of manufacturers' slogans. The average parent also will somehow trust that there is something special about "baby food," which makes it better than fresh fruits, vegetables or proteins found at the local grocer. This simply is not true.

A recent study by the Center for Science in the Public Interest (www.cspinet.org) showed that baby food is more water and filler than food. Take for instance, Gerber's and Heinz's most popular item, "Bananas and Tapioca." Both brands had only 50 percent bananas; the rest was water, sugar and modified starch. Baby food bought in jars at the store is just high-priced junk food.

What's Best for Baby?

Until a child is 6 months old, breast milk is best; after that, it's advised to begin on simple fruits and vegetables which are preferably organic. Introduce one new item at a time over several days; first, to see how the baby responds to each new food item and, second, to allow the baby's digestive system to adapt to the change.

When it comes to fruits, it's best to start with pears, peaches or apples that can be cooked and then mashed into a sauce. Avoid berries, as they can cause allergic responses. Melons are a great raw fruit because they are watery and easier for the child to mush in their mouth. Bananas aren't bad, either, but realize they are binding and might interfere with the child's regular bowel movements.

The recommended vegetables to start with are: steamed carrots, sweet potatoes, zucchini, squash and other easily softened veggies. Once again, introduce them separately, giving a few days for the baby to adjust to each new food item.

Parents should be advised to avoid wheat right away, as well as white-flour products. White flour (bread and pasta) has gone through a bleaching process, which leaves little or no nutritional value in the finished product.

In addition, it's wise to avoid all milk products at least until after age 1. Dairy products produce mucus and often create allergic responses, not to mention they are filled with hormones and antibiotics. Rice milk and almond milk are better substitutes, but as with all other food items, should be introduced slowly.

In Summary

Breastfeeding is best. However; if not possible, have parents seek a healthy alternative for their child. It is vital that we advocate to parents that their baby is growing and developing at an astonishing rate, and it's vital that the building blocks they provide are the best they can be.

Resources

1. www.icpa4kids.org/research/children/breastfeedingalternatives.html.
2. www.icpa4kids.org/wellness/0002.htm.
3. www.mercola.com/2000/oct/22/infant_formula.html.
4. www.nutritionadvocate.com/story/is_gerber.html.
5. www.cspinet.org/reports/cheat1.html.

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