



Infant Feeding Facts for Parents

WHAT YOU SHOULD KNOW:

- Both the World Health Organization and UNICEF recommend that in the absence of mother's milk, infants should be fed human milk from donors. If the mother's milk or donor milk is not available, which is not the case in the United States with our various resources, then artificial infant feeding with milk or soy based formula is the lowest recommended feeding option.
 - Breast is best. I'm sure you've heard this a thousand times since you got pregnant and it's true. Breastfeeding has many important health benefits for baby & mom that are unparalleled by other infant feeding options.
 - Nursing reduces your child's risk of having eczema, food allergies, respiratory allergies and asthma, and can lessen the severity of those she has.
 - Studies show that children who nurse may be healthier and happier and, if they breast-feed for longer than seven months, have a higher IQ.
 - Human milk offers immunological protection against many chronic diseases. According to *Outcomes of Breastfeeding versus Formula Feeding*, compiled by Ginna Wall, MN, IBCLC, and Jon Ahrendsen, MD, FAAFP, human milk feeding is associated with less risk of the following diseases: celiac disease, diabetes, multiple sclerosis, sudden infant death syndrome, childhood cancer, autoimmune thyroid disease, appendicitis, osteoporosis, cardiovascular disease, helicobacter pylori infection (associated with gastric ulcers), Crohn's disease, urinary tract infections, liver disease, colitis, juvenile rheumatoid arthritis, obesity, tonsillitis, allergies, atopic disease, and asthma.
 - According to Cecilia Miller, breastfeeding advocate, "When the breastfed baby does get the occasional sniffles or stomach flu, breast milk provides a perfect, nutritious, well-tolerated re-hydrating fluid so there's no need to use synthetic substances like Pedialyte or glucose water."
 - Reduces risk of SIDs for baby & risk of breast, ovarian, cervical & uterine cancer for mom.
 - Human milk contains levels of vitamins and minerals appropriate for the healthy, full-term, human infant. It is ever-changing -- from the beginning of the feeding to the end, from feeding to feeding, and from day to day.
 - Human milk provides different kinds of defense against disease, including secretory antibodies against specific pathogens. It also contains lactoferrin, which not only is the source of iron for breastfed infants, but also appears to

have antibacterial and antiviral properties. Other components in human milk protect infants on a molecular level because their actual shape hinders certain pathogen's access to the infant.

- Breast milk contains more than 100 ingredients that the formula industry simply can't duplicate. Some sources say there are up to 500 components of breast milk lacking in artificial infant feeding methods (milk or soy based formula).
 - Your milk will come in, whether you plan on breastfeeding or not, and be perfectly suited and nutritionally balanced for the needs of you baby.
 - The law provides you with the ability to pump while working, in suitable and sanitary conditions, without penalization. You are also legally allowed to breastfeed anywhere that you are legally allowed to be including libraries, restaurants, museums, public transportation, and the White House.
 - If your milk supply is a concern, there are many natural ways to increase it including dietary changes like eating oatmeal or delicious lactation cookies.
 - Education, information, support, and encouragement are available to you and your family through your local La Leche League chapter, and any local IBCLC or a CLC of which we thankfully have many in this area.
- Donated breast milk from a properly screened donor is the next best option if mother's must supplement for any reason.
 - Donated milk is available by prescription through milk banks which pasteurize the milk prior to distribution.
 - Donated milk is also available through peer-to-peer organizations such as MilkShare and Eats on Feets. Milk seekers and milk donors match up independently through these organizations and make milk sharing arrangements. Blood tests to screen donors for HIV, Hep B/C, other diseases and drug use is advised and most mothers choose to verify the safety of anything before giving it to their child without being told they need to.
 - Peer-to-peer organizations allow you to find local donors, or those further away. Local donations are usually pump and pick up while distance donors are pump and ship. Milk seekers pick up the cost of milk storage bags and shipping, if shipping is necessary.
 - Find your own milk donor. If you know someone with a breastfeeding child who may have extra in their freezer or be willing to pump a bit after each feed, ask! Friends in need are friends indeed- the worst they can say is no. As above, check their health status before feeding any donated milk to your baby.
 - Donors should be healthy, well-nourished and taking no medication unless it is classified as safe for breastfeeding mothers. Ideally, her baby is the same age as your baby (or the frozen milk she is supplying was pumped when her baby was the same age as your baby). She should be screened for tuberculosis, syphilis, hepatitis-associated antigen, cytomegalovirus, herpes virus, HIV and other infectious agents. She should not smoke, drink alcohol, or consume large

amounts of caffeine or artificial sweetener prior to pumping for you. Her baby should be healthy, gaining well, and free of all infections.

- Studies have shown that flash-heating breast milk can kill bacteria (including HIV) while retaining most of the milk's nutritional and antimicrobial properties, as well as a majority of its important antibodies. You can flash heat donor breast milk by placing a glass jar or glass bottle of expressed breast milk in a pan of water over a flame or single burner, bringing it to a boil and removing the jar. The pasteurization that milk banks employ destroys some of the nutrients and antibodies that this flash-heat method protects while killing harmful bacteria.
- Wet nurse- yes they still exist and are available. According to an article on Time Magazine's website, an LA-based agency supplies wet nurses nationwide and the demand has risen over the past four years. Expect to pay about \$1000/week for a properly screened wet nurse with references.
- Artificial Infant Feeding Methods such as soy and milk-based formula rank last among infant feeding options for a variety of reasons including increased risk of health issues.
 - Formula fed infants have increased prevalence of a range of infectious diseases and health conditions – ear infections, gastrointestinal infections respiratory infections, necrotizing enterocolitis, sepsis, meningitis, diabetes, childhood cancers, obesity, and allergies. These conditions result from the formula's inability to activate the appropriate immune system genes within the digestive tract. Without the activation of these genes, a child's digestive system is left vulnerable to a lifetime of adverse effects.
 - Formula fed infants grow and develop differently from breastmilk fed infants in many ways, including cognitive and neural development resulting in a lower IQ.
 - Tins of powdered infant formula are not sterile and may contain bacteria, or as in recent recalls bug parts and bug larvae. Some harmful types bacteria that contaminate manufactured infant formula include enterobacter sakazakii and salmonella enterica, which the World Health Organization reports can survive in the formula for up to or exceeding one year.
 - There are many industrial contaminants found in infant formula such as heavy metals, plasticizers, including the plastic BPS present in concentrated formula. Infant formulas often contain perchlorate, the base chemical in solid rocket fuels which, when mixed with tap water which may also contain perchlorate, can pose a risk of harm to infants ingesting the formula.
 - The linings of formula cans contain bisphenol-A, or BPA, a plastics chemical which mimics the female hormone estrogen. Exposure to BPA can potentially cause reproductive problems and early puberty. Experts are concerned that the chemical may leach into the formula and be ingested by infants, who are far more vulnerable to adverse effects from contaminants than adults. Liquid and ready-to-feed formulas are more susceptible to this leaching than powdered formulas.

- A White House study, released by first lady Michelle Obama in May 2010, explains that babies who are formula-fed are 22 percent more likely to be obese. Formula derived from cow's milk contains about twice as much protein as human milk. This excess protein results in excess insulin production and prolonged insulin response. Even well into childhood, children who were formula-fed as infants show low levels of the hormone leptin, which is known to "inhibit appetite and control body fatness."
- Soy-based formulas contain plant estrogens which can cause a variety of reproductive issues. While studies have shown that obesity and diabetes risks are lower for children who consume soy-based formulas, they are not without their own set of dangers. Studies by The Society for the Study of Reproduction raise serious questions about the safety and long-term effects of soy-based formulas in infants.
- The FDA does not test infant formulas prior to their marketing and sale. While the FDA inspects manufacturing facilities and performs quality tests on formulas once a year, they do not test infant formula to ensure that it meets nutritional and quality requirements before it is allowed to be sold. Instead, the FDA relies solely on the manufacturers' own reports that their products meet federal standards. Again I point out the numerous recalls, including the formula contaminated with beetle pieces, where the companies knew in advance and waited to recall until the issue was observed while babies ingested tainted food.
- FDA testing has revealed that some baby formulas also contain the chemicals melamine and cyanuric acid. The European Centre for Disease Prevention and Control (ECDC) has stated that these chemicals "can cause renal failure by production of insoluble melamine cyanurate crystals in renal tubules and/or calculi in kidneys, ureter, urethra or the urinary bladder." In other words, when these chemicals are present in baby formula, they can cause kidney stones, kidney and urinary blockages and infections, and kidney failure. In extreme cases, complications of these conditions may result in the deaths of infants.
- MSG, a dangerous neurotoxin, has been found in at least five brands of baby formula. These ingredients are labeled on formula in the US as enzymatically hydrolyzed reduced minerals, casein hydrolysate, carrageenan, and maltodextrin/corn maltodextrin.
- Strict guidelines are put in place to help ensure the safety of formula-fed infants, but unfortunately some problems have still arisen with these infant products. It is imperative that parents have all the information possible and that our society continues to demand higher and higher standards in the production of products for our children and babies.
- All of the negative effects of formula feeding are 100% preventable by feeding a child breast milk from the mother or a properly screened donor.

RESOURCES:

- La Leche League NY- <http://www.llli.org/Web/NewYork.html>
- Breastfeeding at Full Circle, Private Education & Support Groups with Regina Camillieri, IBCLC- http://www.fullcirclewomenshealth.com/classes_support_groups.html
- Donna Bruschi, IBCLC & La Leche League Leader- <http://donnabruschi.com/breastfeeding.html>
- Sandy Trimarchi, CLC- <http://www.birthrootsdoula.com/>
- Antonia Kannengeiser, CLC- <http://www.mybirthrevolution.com/lactation-counselor.html>
- Jenn Sullivan, CLC & Owner of Waddle'n'Swaddle- <http://waddlenswaddle.com/>
- KellyMom, evidence-based info on breastfeeding, sleep & parenting- www.kellymom.com
- Pump & Work Info- <http://www.workandpump.com/gettingstarted.htm>
- Breastfeeding.com for the Working Mom- <http://www.breastfeeding.com/workingmom.shtml>
- Human Milk Bank Association of North America- <http://www.hmbana.org/>
- Human Milk for Human Babies - <http://www.hm4hb.net/>
- Eats On Feets, Donor Milk- <http://www.eatsonfeets.org/>
- MilkShare, Donor Milk- <http://milkshare.birthingforlife.com/>
- Berkley Flash Heating Description & Video- http://berkeley.edu/news/media/releases/2007/05/21_breastmilk.shtml
- Dietary Guidelines For Breastfeeding (also listed below) <http://www.mobimotherhood.org/MM/article-diet.aspx>

FOODS THAT INCREASE MILK SUPPLY:

- Water! You should drink to thirst, about 6-8 glasses a day.
- Food! If you eat well balanced snacks and meals throughout the day it helps.
- Fenugreek, Blessed Thistle, Red Raspberry Leaf & Brewers Yeast
- Fennel, Carrots, Beets & Yams
- Dark leafy greens like arugula, beet leaves, kale, Swiss chard, spinach, collard greens & more.
- Millet, barley and rice
- Oatmeal, steel cut or old fashioned
- Chickpeas, mung beans and lentils
- Garlic, anise, dill, caraway, turmeric, sesame
- Raw and unsalted almonds, cashews, and macadamia nuts (not if you are allergic obviously!)
- Mother's Milk Tea from Motherlove Herbals or Earth Mama Angel Baby
- Green drinks, spirulina, green papaya
- A traditional Chinese remedy used in the early postpartum is homemade chicken soup, simmered with the bones for several hours and rich with chicken fat, taken only once a week— otherwise, it is said to over-stimulate the baby. This remedy is reputed to prevent depression, to restore a mother's vitality, and to help develop an abundant milk supply.

Lactation Cookies

The specialized ingredients in these cookies are said to increase milk supply in lactating females.
For everybody else, they're just a delicious cookie!

Ingredients:

1 stick butter(4 oz)	1 teaspoon vanilla
1/2 cup applesauce (unsweetened)	2 cups whole wheat flour*
1/2 cup sugar	1 and 1/4 teaspoon baking soda
1/2 cup brown sugar	1 teaspoon salt
5 tablespoons water	3 cups steel cut oats
3 tablespoons flax seed meal	1 cup chocolate chips
3 tablespoons wheat germ	4-5 tablespoons brewer's yeast**
2 eggs	

Optional: Add chopped/ground walnuts(have omega 3s), toffee bits, peanut butter chips, cranberries, raisins, whatever you'd like in your cookie... even fresh/dried berries, other nuts work well. This dough is really open to different flavor combinations.

Directions:

- Preheat oven to 350°.
- Soak the flaxseed meal in water and set aside.
- In another bowl, mix together flour, wheat germ, brewer's yeast, baking soda, and salt.
- In stand mixer (a bit tough with hand mixer), cream the butter, sugar, and brown sugar well.
- Add eggs one at a time, scraping the sides down after each. Mix well.
- Add soaked flax and vanilla, beat well.
- Add dry ingredients and mix until incorporated.
- Stir in oats and chocolate chips (and any other additions).
- Scoop by rounded teaspoon onto baking sheet. Should fit 3 x 4 cookies on a large cookie sheet.
- Bake for 10-12 minutes, til lightly golden on edges.
- Cool on tray for a couple minutes before removing to cool completely on rack or paper towels.
- Feed to breastfeeding mama to increase milk supply or to new mama to help milk come in.

*Can also use white flour(or a Gluten-Free Flour Substitute + ½ teaspoon xanthan gum)

**Brewer's Yeast available at vitamin stores. NOT the same as Instant Yeast or dry active Bread Yeast