

Supplemental Nutrition for Infants

As identified by the American Academy of Pediatrics, the U.S. Surgeon General and the World Health Organization, infants grow and develop best when fed human milk directly from their own parents' breast. When this is not possible, parents need to understand their options.

Pumped (Expressed) Human Milk from an Infant's Mother

Pumped milk has the potential to lose a small amount of nutritive or protective factors, but it is still preferable to milk from another lactating parent or a commercial human milk substitute (i.e. cow's milk formula). While a lactating parent may hand express milk from the breasts, most will use a double electric breast pump.

Some lactating parents find they may need to use a Medical Need (aka Hospital Grade) breast pump to establish, or maintain, an adequate milk supply if their baby is not feeding at their breast.

Pasteurized Donor Human Milk

If a lactating parent is not able to produce enough milk for their baby, banked human milk from a **HMBANA milk bank** is an option that is available at MilkWorks. **HMBANA Milk Bank Donors** are lactating parents who donate their extra milk to a HMBANA Milk Bank. These milk donors undergo a detailed medical screening to ensure they meet the requirements established by the Mothers Milk Bank Advisory Council and the Human Milk Bank Association of North America (HMBANA). Donors must be non-smokers, may take only limited medications, and a donor and their family must be well during the time she donates. Donor requirements limit alcohol and caffeine consumption. Milk donors are screened with the same blood tests as blood donors: HIV I/II, HTLV I and II, syphilis, and Hepatitis B and C. Banked milk has been "pasteurized" - a method of heat treating which eliminates bacteria, while retaining most of the milk's beneficial components. If you would like more information, please see our handout *Milk Donation and Outreach Centers and Milk Banks*.

MilkWorks may provide up to 4oz of banked milk from Denver to a baby during their consultation. If additional milk is required, the family may purchase it from MilkWorks in limited quantities, or, they may contact a Milk Bank and inquire about purchasing directly. Banked milk costs about \$25.00 per four ounces, so most families cannot afford this option.

The **Malone Milk Share** program is a "transparent milk sharing model" that became available to families in the Lancaster county area in 2023, prioritizing babies less than 6 months old. This program is a collaboration between Malone Community Center, Healthy Blue and a local pediatric practice. Milk donors undergo the same blood testing of the milk donors as the HMBANA milk banks (see above) BUT the milk itself is NOT tested or processed. Parents can choose to pasteurize at home with "flash heating", though this method does not decrease bacteria and viruses in the milk as effectively as Holder pasteurization.

<https://www.eatsonfeetsresources.org/flash-heating/>

Human Milk Shared informally from another mother

Health care providers are often not comfortable with direct milk sharing because some illnesses and medications can be transferred through breast milk. We do not have adequate research on the best handling of informally shared pumped human milk, and there is some evidence that when milk is shared via the internet and accepted from an unknown mother it is likely to be contaminated. For these reasons, MilkWorks does not



connect mothers with other mothers to directly share milk.

(Cow's Milk) Formula (Regular or Hypoallergenic/Hydrolyzed)

Formula is a known infant food that has been used on a widespread basis for decades. Most medical experts are more comfortable with formula and banked donor milk than shared milk. At the same time, we know that human milk is designed to enhance a baby's immune system and promote optimal health. Until banked donor milk is financially accessible for all babies who require supplementation, or we learn more about how to share unprocessed shared breastmilk, formula will remain a readily available option accepted by health care providers.

The majority of human milk substitutes (known as formula) are made from cow's milk, although some formula may be made from soy or goat's milk. European formulas have been found to be deficient in some ingredients, as they are not as well-regulated as US formulas. A hypoallergenic formula, such as Alimentum or Nutramigen, the size of the cow's milk protein has been partially predigested. It is often recommended if a baby experiences constipation, fussiness, or reflux with a regular cow's milk formula.

Liquid, ready-to-feed formula is recommended for infants under two months of age because it is germ free. Powdered formula is not sterile. If powdered formula is used, the Centers for Disease Control (CDC) recommends that water be heated to 158 degrees F/70 degrees C when preparing the formula. In addition, the formula should be used within two hours of preparation or refrigerated and used within 24 hours. Any unused formula should be thrown away. See the [CDC's Cronobacter Prevention Infographic](#) to learn more.

Adding powdered formula to pumped breastmilk is sometimes suggested to increase calories for your baby- but there is NO research on using powdered infant formula this way. IF you are simply unable to make as much human milk as your baby needs, and they are less than 2 months of age, MilkWorks would recommend you use liquid formula (or mix the powdered formula as described above and use it full strength) as needed to satisfy your baby and support normal growth.

We encourage you to discuss questions and concerns you have about these choices with your baby's healthcare provider.

Our goal is to encourage parents to make an educated decision when it comes to supplementing their babies. We respect and support the individual decisions that mothers make as they nurture and feed their babies.

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