A comprehensive resource to provide you with all the information you need to incorporate donor milk into your baby's feeding routine.

A Family Guide to Donor Human Milk

MOTHERS' MILK BANK CALIFORNIA

Advancing health and wellness with safe donor milk

A LETTER FROM MMBCA'S MEDICAL DIRECTOR:

Welcome to the Family Guide to Donor Human Milk! This comprehensive resource is designed to provide you with all the information you need to safely and effectively incorporate donor milk into your baby's feeding routine.

As a neonatologist who is passionate about infant nutrition, donor milk is something that I use and see the benefits of every day. As a fellow mom and donor, I understand how daunting it can be to navigate this world for the first time. As Medical Director for Mothers' Milk Bank California (MMBCA), I hope to give you knowledge and support, so you can confidently provide your baby with the nourishment they need.

Whether your baby is premature, medically fragile, or facing health challenges that make breastfeeding difficult, donor milk can provide vital nourishment and support healing when it's needed most. This guide will cover everything from the benefits of donor milk for both guardian and baby to safe storage and handling. We'll walk you through this process, step by step.

As you embark on this journey, keep in mind that each baby is unique, and finding the feeding method that works best for you and your little one may take time and patience. But remember: you're not alone. Please reach out to healthcare providers, lactation consultants, and support groups for guidance and encouragement. In this guide, we will include some helpful resources as well.

Congratulations, and good luck.

Rachel Land, MD, FAAP

Medical Director, Mothers' Milk Bank California

Neonatologist, El Camino Health

Clinical Assistant Professor of Pediatrics - Neonatal and Developmental Medicine at Stanford University

MOTHERS' MILK BANK CALIFORNIA

Donor Human Milk in Six Steps

STEP 1

UNDERSTAND YOUR "WHY"

Why are you considering donor milk for your baby? There are many reasons that you might not have a full breast milk supply after birth, including but not limited to:[1]

- premature birth
- lactation difficulties
- absence of the birth mother
- medical conditions or medications that prevent safe breastfeeding

Do any of these resonate with you? These are common situations, and donor milk can help bridge the gap, ideally until breastfeeding is possible.

The World Health Organization (WHO), American Academy of Pediatrics (AAP), and other prominent health organizations recommend that infants be exclusively breastfed for the first six months after birth and continued until the age of two, or even longer.[1,2,3]

When breastfeeding isn't possible, health organizations recommend that for many babies, the best alternative is the use of pasteurized donor human milk (PDHM) from an accredited nonprofit milk bank.

STEP 1

(STEP 1: UNDERSTAND YOUR "WHY" *CONTINUED*)

Containing a unique blend of vitamins, antibodies, and other bioactive components, breast milk is an optimal food source that adapts in real time to a growing baby's needs.[1,4] Breastfeeding is associated with many health benefits to both mom and baby. Babies who are breastfed have a lower risk of several acute infections and chronic illnesses such as asthma, even into adulthood.[1,4] Moms who breastfeed have a lower risk of conditions such as breast and ovarian cancer, Type 2 diabetes, and high blood pressure.[1,4]

When breastfeeding isn't possible, health organizations recommend that for many babies, the best alternative is the use of pasteurized donor human milk (PDHM) from an accredited nonprofit milk bank.[5,6,7] Donor milk contains many of the healthy bioactive components in breast milk that are absent from formula.[5,6,7] These components include antibodies that may protect against infection, along with enzymes and other molecules that support digestion, boost a baby's fragile immune system, and promote early development.[1,7,8,9]

The health boost provided by donor milk is especially important for very low birth weight (VLBW) and premature infants, who are at risk of life-threatening complications like necrotizing enterocolitis (NEC), a serious disease with up to a 50% mortality rate.[1,7,8,9] Donor milk has been shown to cut the onset of deadly NEC in half, compared with babies fed formula.[9]

With benefits like optimal nutrition, protection against infections and other health conditions, and support for healthy development, donor milk can help lay the foundation for a lifetime of improved health. Use of donor milk is also associated with increased breastfeeding, which most effectively supports the health of both mom and baby in the long term.[10,11]

We are here to support you in providing the best possible nutrition for your baby. So, why are you seeking donor milk for your baby? Homing in on your "why" can help guide your decisions when things feel confusing or tough.

STEP 2

FIND A TRUSTED SOURCE

Not all sources of donor milk are created equal. Look for a reputable organization, such as a nonprofit milk bank accredited by the Human Milk Banking Association of North America (HMBANA). HMBANA ensures that milk banks adhere to strict safety protocols and ethical standards that have been developed in collaboration with the U.S. Food and Drug Administration (FDA).[12]

Thanks to this rigor, there are no reported cases of donor milk causing an infection in a baby, and the risk of exposure to noninfectious contaminants, such as medications, drugs, pesticides, or mercury, is also exceedingly low.[7,12] It is important to understand that informal milk-sharing does not adhere to these standards and is therefore discouraged by health organizations.[7]

There are now 32 HMBANA member milk banks in North America.[13] California is one of very few states to have two HMBANA-accredited nonprofit milk banks within its borders:

- Located in Northern California, **Mothers' Milk Bank California (MMBCA)**, founded in 1974 by Maria Teresa Asquith as San Jose Mothers' Milk Bank, is a charter member of HMBANA and the oldest operating nonprofit milk bank in the U.S.[14]
- Located in Southern California, the **UC Health Milk Bank** was launched out of University of California San Diego (UCSD) in 2022 and is a part of the Human Milk Institute (HMI), which combines research, clinical care, and milk banking.[15]

MMBCA PRIORITIZES SAFETY

Our donors are healthy women with extra breast milk who generously choose to help other families. We support donors through every step of the process and honor their gift of milk.

STEP 2

(STEP 2: FIND A TRUSTED SOURCE *CONTINUED*)

Although donor milk is increasingly recognized as a valuable resource, not all healthcare providers are fully informed about its availability or benefits. Don't be discouraged if that's the case. Look for information and support from reputable organizations, and ask your healthcare provider or lactation consultant for further recommendations.

SCREENING & APPROVAL:

Prospective donors complete a comprehensive medical and lifestyle screening, including detailed health history and third-party blood testing. This ensures that donated milk is free from infectious diseases, medications, drugs, or other factors that could be harmful to fragile infants.

DONATION PROCESS:

Approved donors receive pumping and transport supplies, along with clear instructions. They may ship frozen milk (with all costs covered by MMBCA), schedule a home pickup, or drop off milk at a convenient collection site. Donors do not receive monetary compensation.

MILK HANDLING & PROCESSING:

When milk is received, it is carefully thawed and prepared for processing. If the milk passes initial quality checks, it is pooled with milk from other donors. Pooling helps standardize nutrient composition and reduces the influence of any single donor's diet or environment.

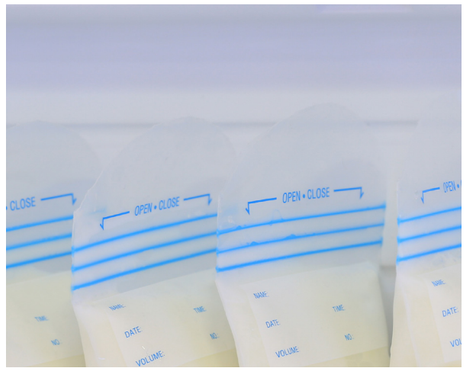
PASTEURIZATION & SAFETY TESTING:

The pooled milk is pasteurized using the industry-standard Holder method—heating to 62.5°C for 30 minutes—to destroy harmful pathogens while retaining as many of the milk's beneficial components as possible.[12] The California Department of Public Health (CDPH) Laboratory then conducts microbiological testing to confirm that the pasteurized milk is safe for medically fragile infants.

STORAGE & DISTRIBUTION:

After processing, pasteurized donor human milk (PDHM) is frozen and stored in tamper-evident, BPA-free containers. PDHM can be safely stored for several months until it is needed by hospitals or outpatient families.[16]

As an HMBANA member, MMBCA follows rigorous protocols to ensure that we always provide safe and high-quality donor milk for parents and babies in need.



IF YOU HAVE QUESTIONS, PLEASE ASK.

MMBCA, in collaboration with our healthcare partners, offers comprehensive guidance and support for families using donor milk. This includes access to lactation experts, support groups, and online resources, ensuring families have valuable information and assistance every step of the way.

STEP 3

SAFELY STORE DONOR MILK

Just like any other food, breast milk must be stored and handled properly to make sure it remains safe for your baby to consume. You should receive specific and detailed guidelines for donor milk storage and feeding to prevent contamination and spoilage.

Here are some general recommendations on breast milk storage. [17]

- **Frozen donor milk can be stored in the freezer until needed**, but note and clearly label the dates to avoid using expired milk.
- Store milk in the back of the freezer or refrigerator, where it is coldest. **Do not store milk in the refridgerator door**, which experiences more temperature changes.
- Thaw and warm milk according to your instructions to preserve safety and nutrition. **Do not use a microwave**, which can destroy nutrients, and because uneven heating may burn your baby's mouth.
- **Use thawed milk within 96 hours.**
- **Never refreeze breast milk after thawing.**
- **If you decide to warm milk, use it within 2 hours.**

Once you've mastered donor milk storage at home, busy parents will need to learn how to safely transport and use donated breast milk on the go. Invest in insulated storage bags or coolers, and pack them generously with ice packs to maintain a safe temperature.

STEP 4

MASTER FEEDING TECHNIQUES

New parents can become discouraged when faced with breastfeeding challenges. But it often takes time for lactation to be established. Even though it might seem like it should be the most natural thing in the world, there's always a learning curve to feeding a baby. In the overwhelming first days after birth, supplementing with donor milk can be really helpful for your baby's nutrition and your own morale.

Whether you're expressing your own breast milk or using donor milk, you'll need to learn how to pump and bottle feed. Proper pumping techniques can help maximize milk supply and ensure comfort. Bottle feeding techniques can help mimic the natural flow of breastfeeding. Working with a healthcare provider or lactation consultant can help address any concerns or challenges.

Here are some additional online resources on infant feeding:

- AAP: "Infant Food and Feeding"*
- CDC: "Breastfeeding Fast Facts"**
- CDC: "Pumping Breast Milk" ***

In your internet browser, search
** "American Academy of Pediatrics, Infant Food and Feeding" or go to https://www.aap.org/en/patient-care/healthy-active-living-for-families/infant-food-and-feeding/*

***"CDC Breastfeeding Fast Facts"*
or go to https://www.cdc.gov/infant-toddler-nutrition/breastfeeding/index.html

****"CDC Pumping Breast Milk"*
or go to https://www.cdc.gov/infant-toddler-nutrition/breastfeeding/pumping-breast-milk.html

STEP 5

OPTIMIZE FEEDING FOR YOUR UNIQUE BABY

So, you've homed in on your "why," found a trusted source of donor milk, mastered safe milk storage, and learned some neat techniques for feeding your baby. It's smooth sailing now, right?

Well, not quite. Each baby and each parent is unique. Your healthcare provider can offer personalized guidance on feeding frequency and volumes, based on your child's age, weight, and individual nutritional requirements.

HERE ARE A FEW MORE CONSIDERATIONS AND FAQS :

How long should I use donor breast milk?
Some infants require donor milk for a short period, while others may benefit from longer-term supplementation, depending on individual circumstances and healthcare provider recommendations.

Why does my donor milk taste or smell weird after defrosting?
Human milk naturally varies in smell and taste because of differences in diet, medications, and processing methods. The breakdown of fatty acids during thawing can also change the smell.[18] Don't be alarmed—it's normal and harmless, and your baby will still drink it.

Does "high lipase" have anything to do with the smell or taste?
Lipase is an important, naturally occurring enzyme in human milk that helps digest fats. There is a common misconception that "high lipase" causes a soapy

STEP 5

(STEP 5: OPTIMIZE FEEDING FOR YOUR UNIQUE BABY *CONTINUED*)

or metallic smell, but there is no evidence to support this.[18] "Scalding" milk is believed to improve the smell or taste of milk, but it is not advised by health organizations because scalding can destroy bioactive components. There are no clear guidelines, and ultimately, if you have found that scalding helps your baby accept human milk, it still may be better than infant formula.

What if I want to blend donor milk with my own breast milk?
Start with equal small parts of each milk type and adjust based on your baby's preferences and nutritional needs. Your healthcare provider or lactation consultant can offer personalized guidance to optimize feeding for your little one.

Are there any cultural or religious considerations I should be aware of?
Cultural and religious beliefs may influence perceptions of donor milk usage. It's essential to respect individual preferences and seek culturally sensitive support and guidance, if needed.

Every step you take to provide the best nourishment for your baby is a step in the right direction.

STEP 6

SEEK SUPPORT AND GUIDANCE

Finally, remember that **you're not alone on this journey**. There are many resources available to help you make informed decisions about your baby's health and well-being:

CONSULT
research-backed recommendations for breastfeeding, donor milk, and infant nutrition from reputable organizations listed on the following pages.

REACH OUT
to healthcare professionals, including lactation consultants, for personalized advice tailored to your individual circumstances.

CONSIDER JOINING
a support group for encouragement from people who understand what you're going through.

STEP 6

(STEP 6: SEEK SUPPORT & GUIDANCE *CONTINUED*)

ADDITIONAL RESOURCES

American Academy of Pediatrics (AAP): evidence-based guidelines and resources on breastfeeding, infant nutrition, and child health

American College of Obstetricians and Gynecologists (ACOG): information on breastfeeding, prenatal care, and maternal health

Academy of Breastfeeding Medicine (ABM): global guidelines and research on breastfeeding, lactation, and human milk

World Health Organization (WHO): global recommendations and guidelines on infant feeding, including breastfeeding and donor milk

United Nations Children's Fund (UNICEF): advocates for children's rights and provides resources on breastfeeding, infant nutrition, and maternal health worldwide

California Department of Public Health (CDPH): provides information on research, laws, and initiatives related to public health, including breastfeeding

U.S. Breastfeeding Committee (USBC): primarily works with groups on breastfeeding-supportive policies and offers some parent resources

International Lactation Consultant Association (ILCA): certifies and provides information about lactation consultants

La Leche League (LLL) USA and International: peer-to-peer support, education, and encouragement to breastfeeding mothers

Legal Protections for Nursing Employees Under the Fair Labor Standards Act (FLSA)

Legal Rights for Pregnant and Parenting Students Under Title IX

OUR COMMUNITY PARTNERS IN CALIFORNIA

California Breastfeeding Coalition (CBC): promotes and supports lactation and human milk feeding

BreastfeedLA: supports breastfeeding through advocacy and education

Women, Infants, and Children Program (WIC): provides nutrition information and support, including breastfeeding, to low-income women, infants, and children

You are not alone on this journey. Use these resources to make informed decisions about your baby's health and well-being.

GLOSSARY

donor milk: breast milk collected from a healthy, lactating person and donated to another baby who needs it; also known as donor human milk, donor breast milk.

pasteurization: a process of food safety and preservation in which the food item is heated gently to eliminate pathogens.

pasteurized donor human milk (PDHM): may be used interchangeably with donor milk and similar terms but specifically refers to donor milk after it has been pasteurized

premature birth: the delivery of a baby before 37 weeks of pregnancy; also known as preterm birth.

very low birth weight (VLBW): a birth weight of less than 1,500 grams (3 pounds, 4 ounces). The average birth weight of a full-term baby is around 3,500 grams (7 pounds, 12 ounces).

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MOTHERS'
MILK BANK
CALIFORNIA

Our Mission

Advancing health and wellness with safe donor milk.

Our Vision

A world where human milk is accessible to all, beginning at birth.

Office hours: Monday – Friday, 8:00 am to 4:30 pm

Toll Free (877) 375-6645
Phone (408) 998-4550
Fax (408) 297-9208

1887 Monterey Road
Suite 105-110
San Jose, CA 95112

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