Love In Every Drop; Optimizing Donor Milk Quality and Safety

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UC San Diego Health

March 2023

UNIVERSITY OF CALIFORNIA HEALTH Milk Bank

Current Recommendations For Pasteurized Donor Human Milk Use

- Surgeon General Call to Action (2011)
- AAP Donor Milk Policy (2017)
- AAP/ACOG Perinatal Guidelines (2017)
- AAP Nutrition Book (2020)
- HHS Dietary Guidelines (2020)
- AAP Red Book (2021)
- AAP Human Milk and VLBW (2021)
- AAP Breastfeeding Clinical Report (2022)
- AAP Neonatal Cardiac Care Collaborative (2022)

CLINICAL REPORT Guidance for the Clinician in Rendering Pediatric Care

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

Promoting Human Milk and Breastfeeding for the Very Low Birth Weight Infant

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Provision of mother's own milk for hospitalized very low birth weight (VLBW) (≤1500 g) infants in the NICU provides short- and long-term health benefits. Mother's own milk, appropriately fortified, is the optimal nutrition source for VLBW infants. Every mother should receive information about the critical importance of mother's own milk to the health of a VLBW infant. Pasteurized human donor milk is recommended when mother's own milk is not available or sufficient. Neonatal health care providers can support lactation in the NICU and potentially reduce disparities in the provision of mother's own milk by providing institutional supports for early and frequent milk expression and by promoting skin-to-skin contact and direct breastfeeding, when appropriate. Promotion of human milk and breastfeeding for VLBW infants requires multidisciplinary and system-wide adoption of lactation support practices.

STATEMENT OF PROBLEM

Provision of mother's own milk for hospitalized very low birth weight (VLBW) (≤1500 g) infants in the NICU provides short- and long-term health benefits. Mothers of very preterm infants face many challenges in the provision of breast milk. The goal of this clinical report is to provide neonatal clinicians up-to-date information regarding NICU lactation support for mothers of VLBW infants.

abstract

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Drs Parker, Stellwagen, and Puopolo drafted the original manuscript; and all authors provided intellectual insight and reviewed, edited, and approved the final manuscript as submitted.

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University of California Health Milk Bank USA Pasteurized Mothers' Milk

Non-profit Milk Banking basics

- Regulated by HMBANA- the Human Milk Banking Association of North America
- HMBANA provides accreditation
- FDA food facility registration
- Local rules may add additional scrutiny
- Donors are not paid
- Milk is always heat pasteurized

HMBANA believes in a world where all infants have access to human milk through support of breastfeeding and use of pasteurized donor human milk.

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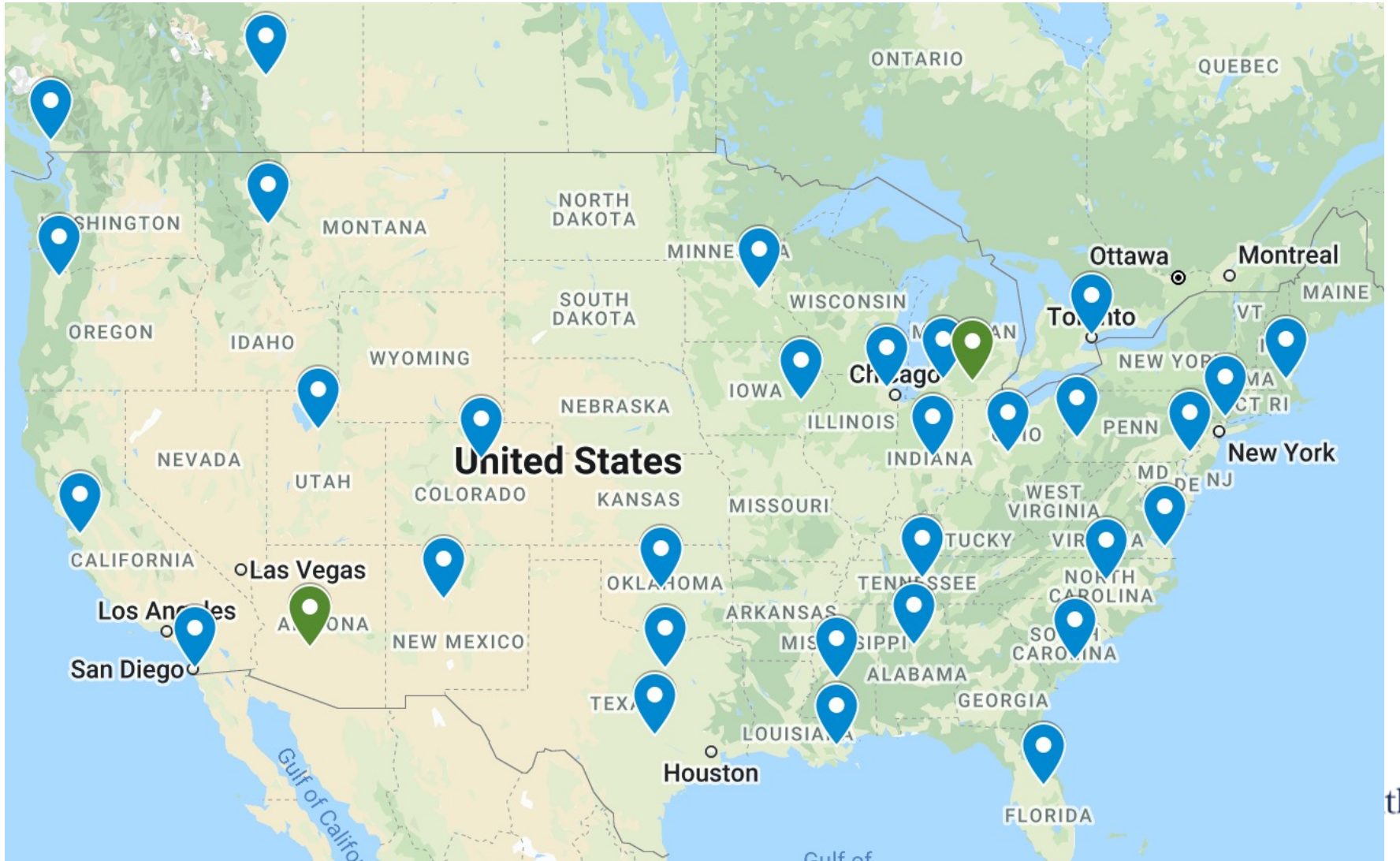
HUMAN MILK BANKING ASSOCIATION OF NORTH AMERICA

Mobilizing the Healing Power of Donor Milk



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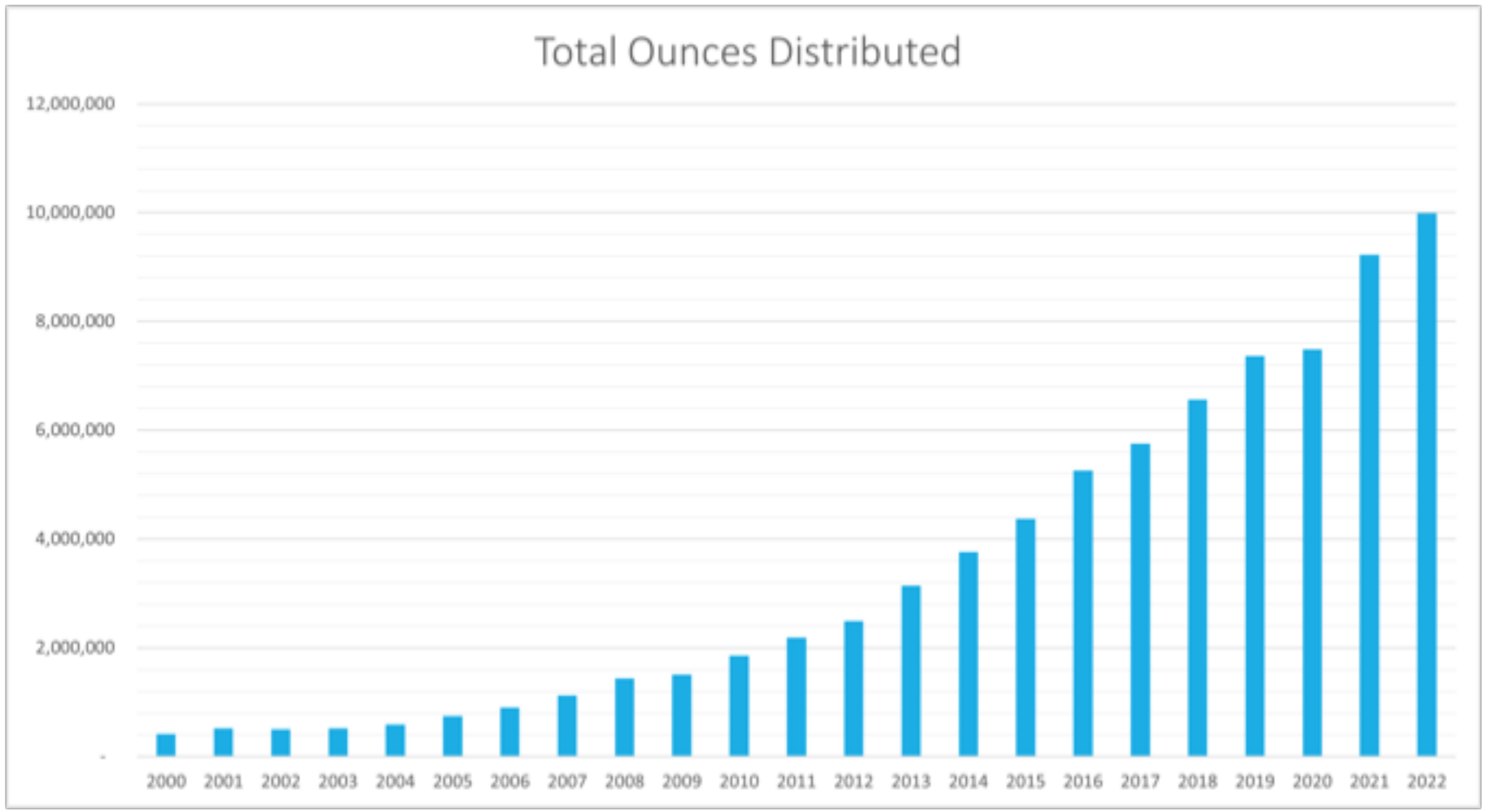
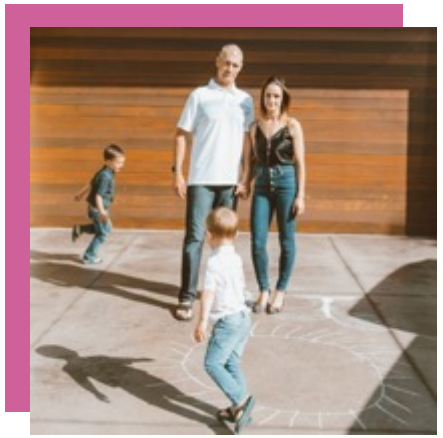


University of California Health Milk Bank USA Pasteurized Mothers' Milk

UC Health Milk Bank

- UC San Diego owned and operated
- UC Health supported
- Opened Sept 2020
- Physician led
- Located in the San Diego Blood Bank
- Launched with a generous family philanthropic gift
- Collaboration with UC San Diego human milk research, biorepository and Human Milk Institute
- Focus on best practice with a nutrition and protein targeted approach

University of California Health Milk Bank Timeline



Johnson Family Gift, 2016

Construction, Spring 2020

Team Hired, May 2020

Open Sept. 2020!

Project Approval, August 2019

UC Health Co-Branding, May 2020

UNIVERSITY OF CALIFORNIA HEALTH Milk Bank

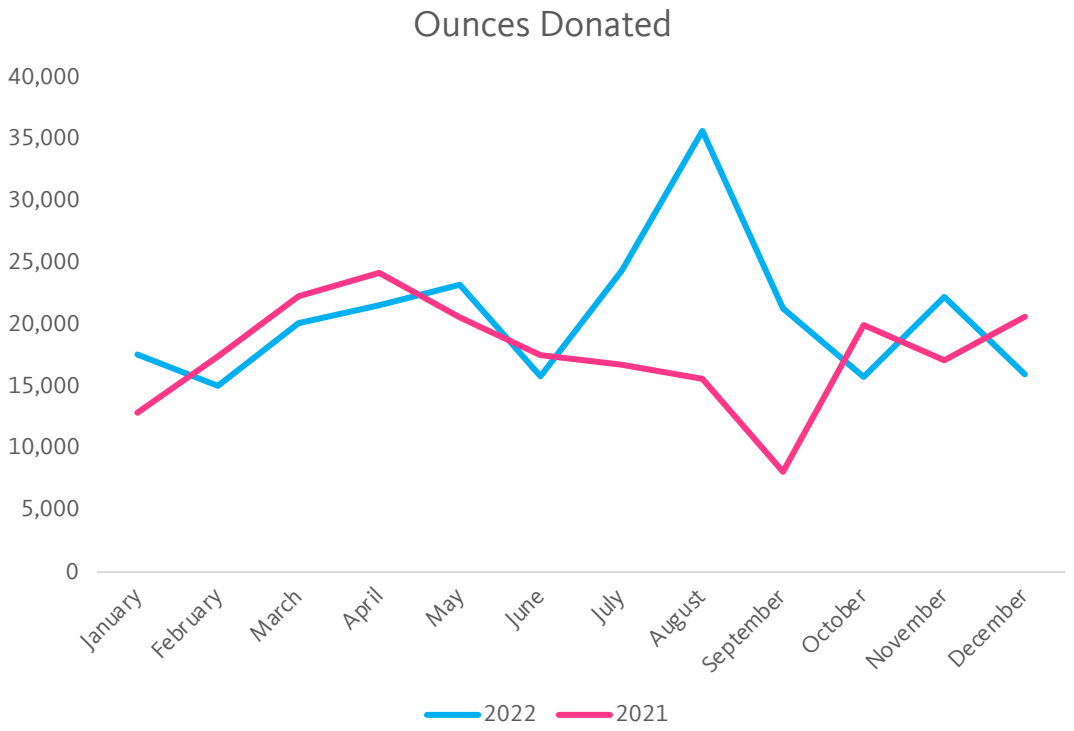
CSM Go Live, May 2020

University of California Health Milk Bank USA Pasteurized Mothers' Milk

UC Health Milk Bank Donors and Donation

- In 2022 the UC Health Milk Bank approved **341 donors** and collected **248,827 ounces** of milk
- We approved **28% more donors** and collected **17% more ounces of breast milk** than 2021

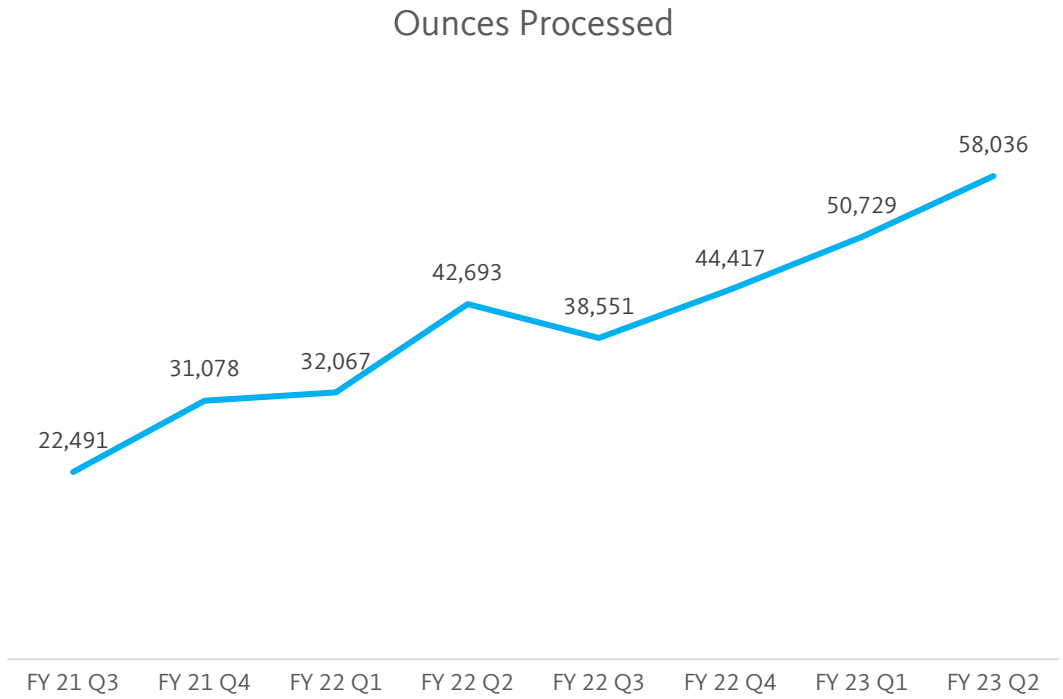
2022 Approved Donors
Southern CA

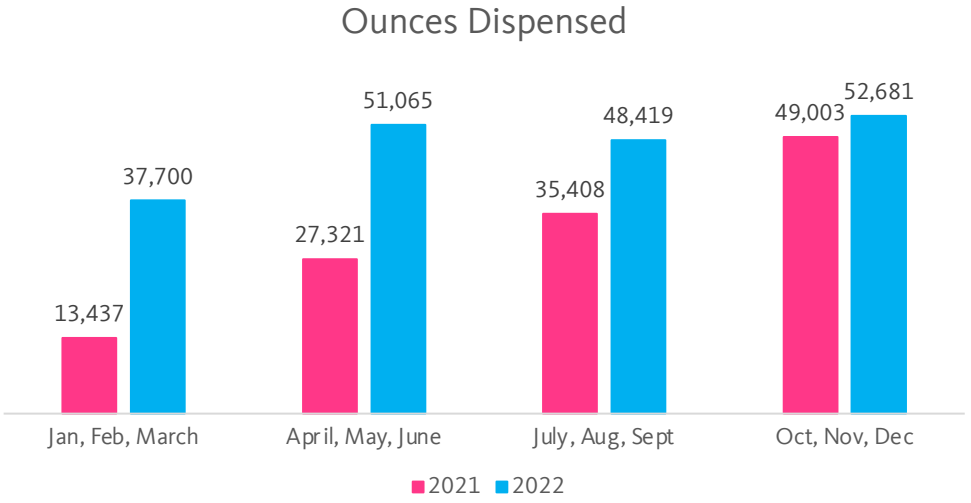


Mothers in the community supported families in need during the summer formula shortage. Donor enrollments increased five-fold, and we received our most ounces donated ever in July and August.

UC Health Milk Bank Processing and Dispensation

- In 2022 the Milk Lab **produced 191,733 ounces** of pasteurized human donor milk, a 33% increase from 2021
- The UC Health Milk Bank **dispensed 189,866 ounces** of donor milk to hospitals and outpatient families, a 34% increase from 2021





Best Practice; Quality And Safety

Regulatory:

- HMBANA
- Tissue Bank License
- FDA food facility registration
- Facility construction
- Food Safety training

Milk donor:

- Screening
- Education
- Serologic testing
- Provider contact
- Close contact with donors

Milk processing:

- Pre-culture
- Pooling
- Nutrient analysis
- Pasteurization
- Post-culture

Milk product management:

- Bottles and capping system
- Electronic milk tracking system
- Labeling
- Cold storage
- Transport policies

University of California Health Milk Bank USA Pasteurized Mothers' Milk

Welcome to the Milk Bank!

- Facility
- Staff
- Equipment
- Information technology
- Donors
- Processing
- Sales

Facility

- Adequate square footage
- Layout for optimal staff workflow
- Quiet staff areas for phone calls
- No opening into common areas or restrooms
- Washroom distant from processing room
- Milk Lab/Clean room (not ISO certified)
- Pest control
- High air flow
- Generator power

Staff

- Executive Director
- Medical Director
- Business Manager
- Milk Bank Coordinator
- Donor Coordinator
- Milk Techs (DTR)
- Medical Advisory Board
- Board of Directors (opt for hospital milk bank)
- Food Safety expert (PCQI)

Equipment

- Cold Storage:
  - Freezers vs. cold room
  - Refrigerator
  - Blast Chiller
- Large Equipment:
  - Pasteurizer
  - Ware washer
  - Milk analyzer
- Small equipment
- General considerations:
  - Two of everything
  - Food safe equipment
  - Lab quality

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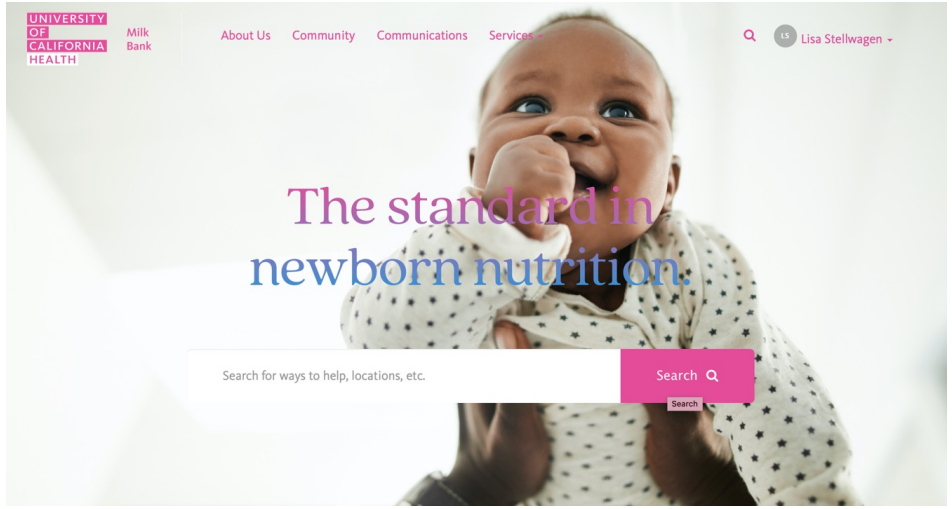
Information Technology

- Customer Service Management portal
- Temperature verification
- Milk bank management software
- Shared drive for other documents
- Event/complaint reporting system
- Logistics/procurement systems
- Everything secure/encrypted
- Retain donor/milk records 10 years



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Milk Donors

- Outreach
- Screening
- Approval
- Onboarding
- Engagement
- Shipping/drop off
- Periodic check-in

Outreach

#1 is Google

- Social media
- Families who used PDHM in hospital
- Hospitals
- Physician offices
- Lactation/doulas
- WIC
- Print/news media

Who Are We?

University of California Health Milk Bank is a non-profit donor human milk bank and a member of the Human Milk Banking Association of North America and our mission is to provide human donor milk to all babies in need.

What Is A Milk Bank?

A milk bank accepts donated frozen mothers' milk from approved donors and processes it to provide a safe pasteurized human milk product for hospitalized, newly born, or fragile children. Even an ounce of milk can improve the health outcomes of small or sick newborns.

Who Donates Milk?

Women who are producing more milk than their infant can use. Some mothers end up with milk they can't use because their baby develops an intolerance to her milk. Some donors pump simply to donate because they believe it is an important gift. For all these mothers this is an amazing gift they give.

How Do I Get Started?

To get started today, register on our web portal uchealthmilkbank.ucsd.edu. Our donor enrollment process is online and can be done from your computer anytime!

For more information on donating or purchasing donor milk call 858-249-MILK (6455) or email us at ucmilkbank@health.ucsd.edu

Love in every drop.

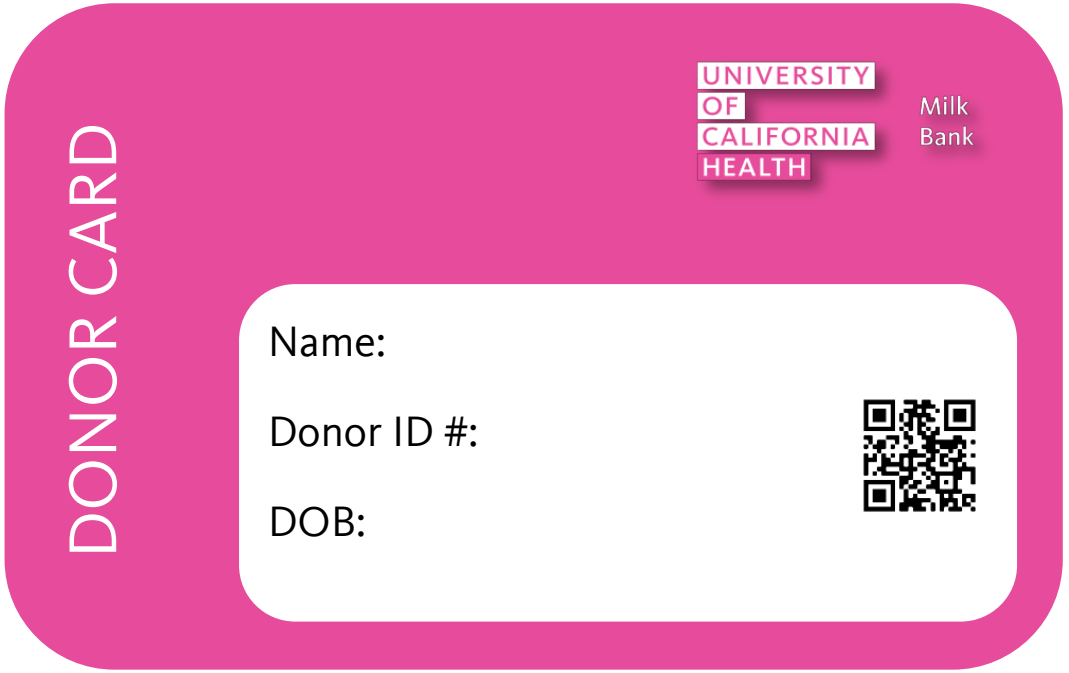
University of California Health Milk Bank USA Pasteurized Mothers' Milk

Who Can Donate?

- Healthy mother
- Extra milk
- More than 100 ounces
- Baby less than 12-18 months old
- Milk less than 8 months old

Areas of concern:

- Medications
- Substance use
- Recent transfusion/transplant
- Risk for bloodborne infections



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UC Health Milk Bank Donor Profile

- Location
  - 50% San Diego
  - LA region
  - Northern California
  - Arizona and Nevada
  - Visitors
- Demographics
  - Age 18-47
  - Health Care Workers
  - Overproducers
  - Exclusive pumpers
  - Families who used PDHM in hospital
  - NICU families
  - Bereaved families
  - Surrogates

Cherry Blossom Family Program

- ~5% of donors are families who have lost a child
- Mostly NICU/Stillborn
- NICU or Lactation suggests donation to them
- Donate a few weeks/months
- Value to the family
- Milk value to the milk bank (colostrum and early milk)

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We extend our heartfelt condolences to you and your family. Although you understandably have a great deal on your mind, we want to share some information to help you make some decisions.

Our Cherry Blossom Family program was created to support you during this difficult time and help you honor your child's life and time on earth with dignity. The cherry blossom is the most breathtaking, yet fleeting flower and beautifully represents the life of your child.

Inside your bag you will find a Limerick breast pump. You can use this pump, pass it along to someone else, or return it* Also enclosed is a memorial stone heart, a small token that we hope will bring some peace and comfort and let you know you are not alone.

You probably have questions about what is happening to your body, hopefully the information below will provide some answers.

Why Am I Still Producing Milk?

Your body starts making milk as early as the 4th month of pregnancy. From that point onwards, it is normal for your body to make milk, even if your baby passes. Your milk might come in, you may leak milk, or have full breasts.

What Are My Options?

There are a couple of options - comfortably stop milk production or express it and possibly donate. There is no right or wrong decision. The best option is the one that meets your needs and goals during your journey through grief and healing.

I Want To Stop My Milk.

If there is no stimulation to make milk (e.g., no pumping or hand expression), your milk will soon dry up. However, you may risk feeling pain from fullness (engorgement) or even infection due to blocked ducts (mastitis). If you have full breasts and develop fever, body aches, chills, and/or a red painful area on your breast, you may have an infection and you should call your doctor.

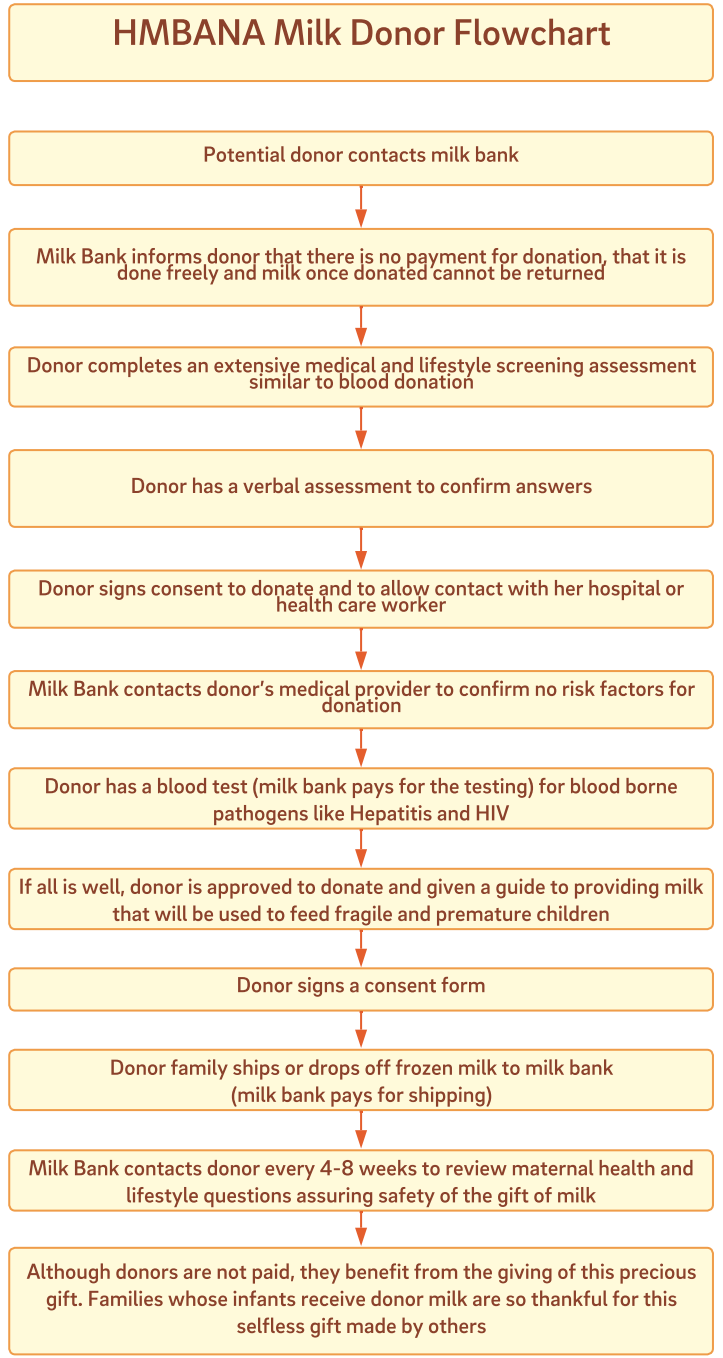
There are things you can do to slow down your milk production, to avoid full breasts and infection, and be more comfortable until milk production is fully suppressed**. Binding your breasts or wearing tight clothing is not recommended. This can cause pain, inflammation, and blocked milk ducts**.

- Express a small amount of milk by hand or pump every few hours to ease the fullness and prevent blocked milk ducts. Then, gradually, decrease the number of times a day you express milk over the following days or weeks.
- Hot showers can cause your breasts to release a small amount of milk and make you more comfortable. Cold compresses placed in a supportive bra can help relieve swelling and pain. Wearing nursing pads can prevent leaking through your clothing.
- Taking an over-the-counter anti-inflammatory medication like ibuprofen (Motrin, Advil) can help with pain relief. Prescription medication to stop milk production can be taken but should first be discussed with your provider to make sure it is safe for you.

Be patient with your body (and yourself); you may need time to slowly stop producing milk. If you need additional support, please reach out to your health care providers, family, friends, or community resources.

Donor Screening Process

- Milk Bank portal (customer service management platform)
- Bereaved family pathway
- Questionnaires (mother and child)
- Telephone interview
- Consents signed
- Provider approval form
- Blood test
- Approval process
- Donor education
- Milk acceptance



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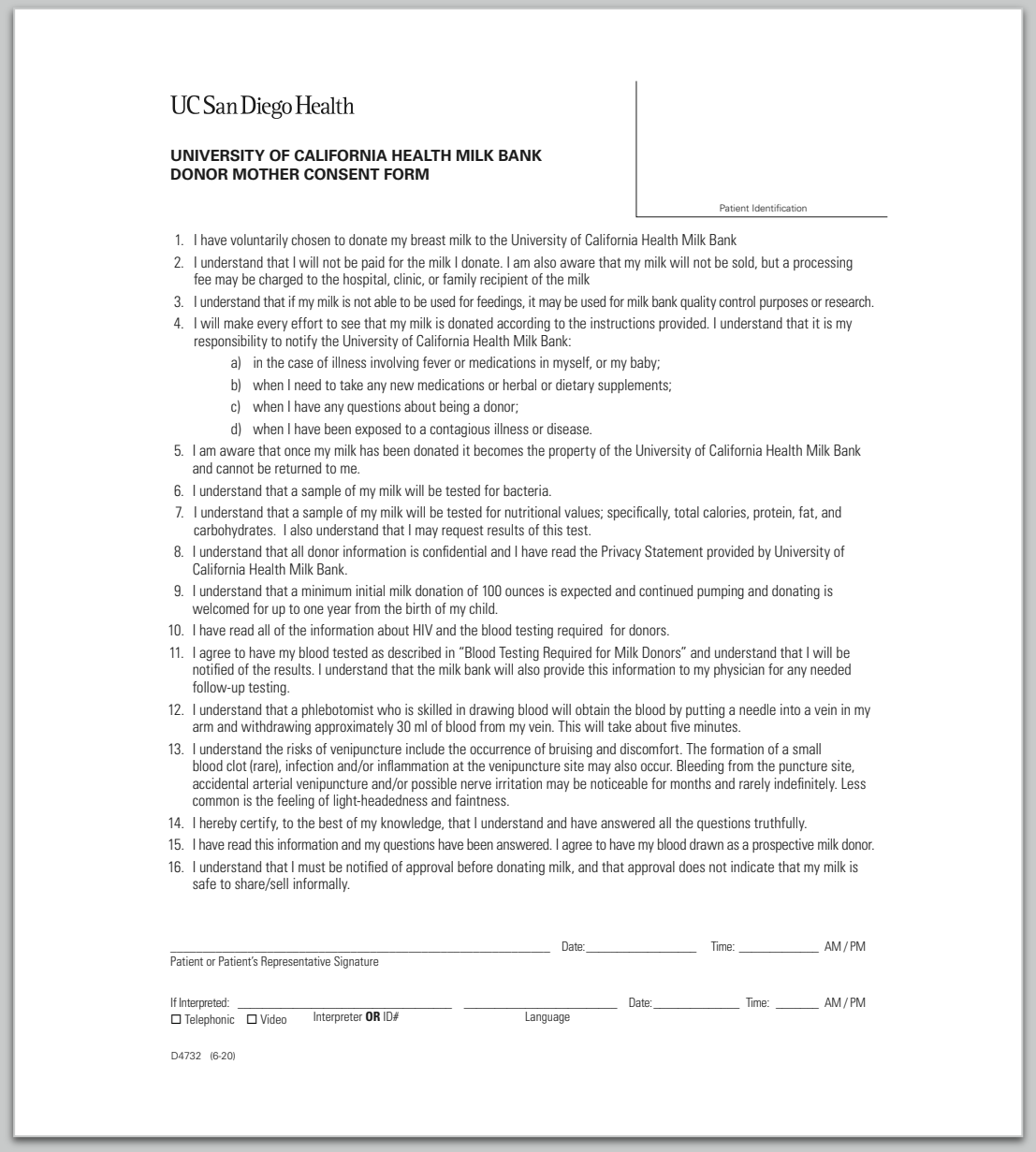
Donor Consents

1. Consent for donation
2. Consent for medical record release
3. Privacy
4. IRB consent (optional)
5. Media consent (optional)



UC San Diego Health

UNIVERSITY OF CALIFORNIA HEALTH MILK BANK
DONOR MOTHER CONSENT FORM

Patient Identification

1. I have voluntarily chosen to donate my breast milk to the University of California Health Milk Bank
2. I understand that I will not be paid for the milk I donate. I am also aware that my milk will not be sold, but a processing fee may be charged to the hospital, clinic, or family recipient of the milk
3. I understand that if my milk is not able to be used for feedings, it may be used for milk bank quality control purposes or research.
4. I will make every effort to see that my milk is donated according to the instructions provided. I understand that it is my responsibility to notify the University of California Health Milk Bank:
    a) in the case of illness involving fever or medications in myself, or my baby;
    b) when I need to take any new medications or herbal or dietary supplements;
    c) when I have any questions about being a donor;
    d) when I have been exposed to a contagious illness or disease.
5. I am aware that once my milk has been donated it becomes the property of the University of California Health Milk Bank and cannot be returned to me.
6. I understand that a sample of my milk will be tested for bacteria.
7. I understand that a sample of my milk will be tested for nutritional values; specifically, total calories, protein, fat, and carbohydrates. I also understand that I may request results of this test.
8. I understand that all donor information is confidential and I have read the Privacy Statement provided by University of California Health Milk Bank.
9. I understand that a minimum initial milk donation of 100 ounces is expected and continued pumping and donating is welcomed for up to one year from the birth of my child.
10. I have read all of the information about HIV and the blood testing required for donors.
11. I agree to have my blood tested as described in "Blood Testing Required for Milk Donors" and understand that I will be notified of the results. I understand that the milk bank will also provide this information to my physician for any needed follow-up testing.
12. I understand that a phlebotomist who is skilled in drawing blood will obtain the blood by putting a needle into a vein in my arm and withdrawing approximately 30 ml of blood from my vein. This will take about five minutes.
13. I understand the risks of venipuncture include the occurrence of bruising and discomfort. The formation of a small blood clot (rare), infection and/or inflammation at the venipuncture site may also occur. Bleeding from the puncture site, accidental arterial venipuncture and/or possible nerve irritation may be noticeable for months and rarely indefinitely. Less common is the feeling of light-headedness and faintness.
14. I hereby certify, to the best of my knowledge, that I understand and have answered all the questions truthfully.
15. I have read this information and my questions have been answered. I agree to have my blood drawn as a prospective milk donor.
16. I understand that I must be notified of approval before donating milk, and that approval does not indicate that my milk is safe to share/sell informally.

_____ Date:_____ Time: _____ AM / PM
Patient or Patient's Representative Signature

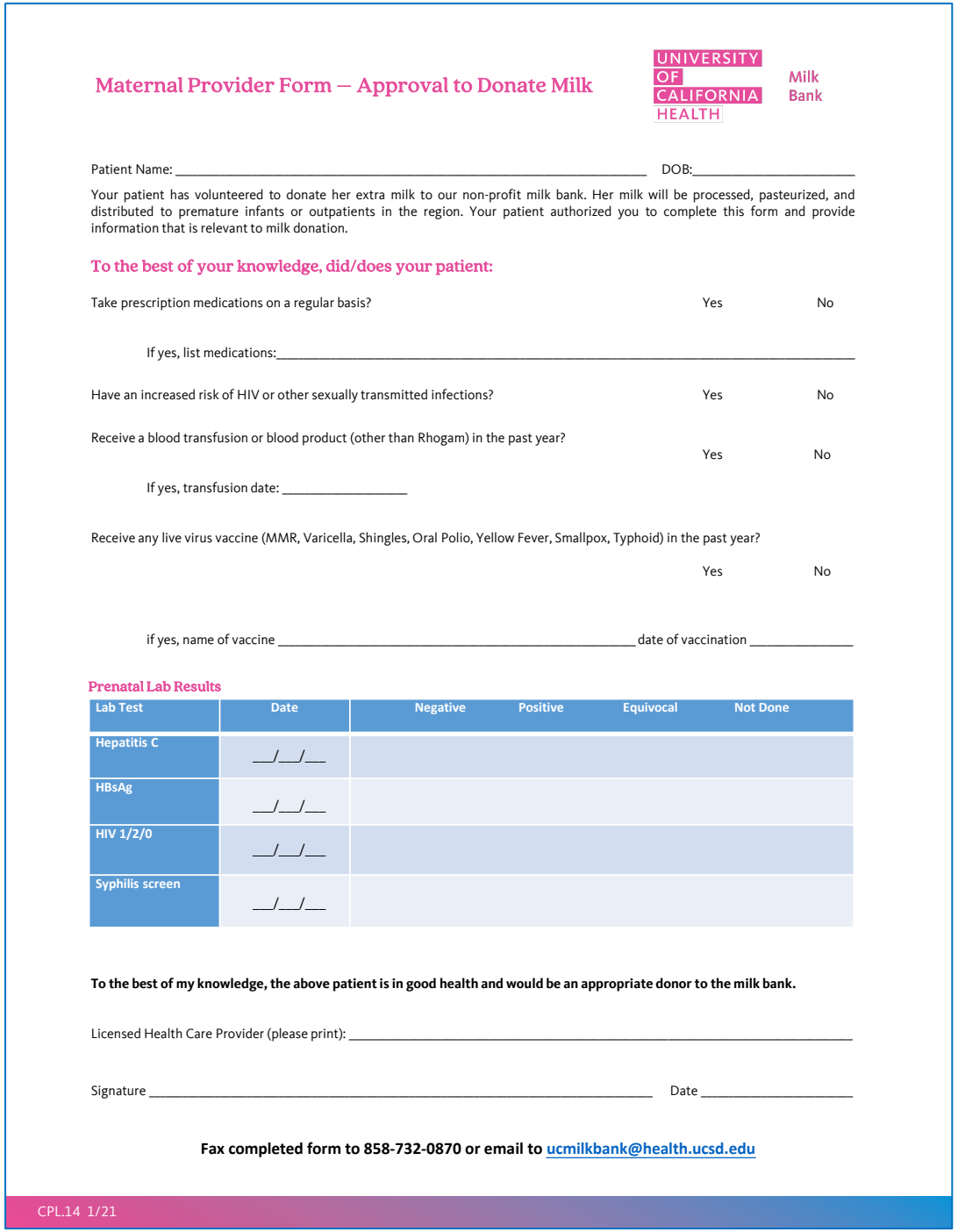
If Interpreted: _____ _____ Date:_____ Time: _____ AM / PM
☐ Telephonic ☐ Video Interpreter **OR** ID# Language

D4732 (6-20)

University of California Health Milk Bank USA Pasteurized Mothers' Milk

Donor Safety Checks

- Clear instructions/welcome packet
- Donation is voluntary; no payment
- Keeping questionnaires up to date
- Provider medical check in
  - Maternal provider form
  - Hospital record review
  - Care Everywhere
  - Prenatal lab review
- Consent forms signed
- Ongoing periodic check-in



Maternal Provider Form – Approval to Donate Milk

UNIVERSITY OF CALIFORNIA HEALTH Milk Bank

Patient Name: _____ DOB:_____

Your patient has volunteered to donate her extra milk to our non-profit milk bank. Her milk will be processed, pasteurized, and distributed to premature infants or outpatients in the region. Your patient authorized you to complete this form and provide information that is relevant to milk donation.

To the best of your knowledge, did/does your patient:

Take prescription medications on a regular basis? Yes No

If yes, list medications:_____

Have an increased risk of HIV or other sexually transmitted infections? Yes No

Receive a blood transfusion or blood product (other than Rhogam) in the past year? Yes No

If yes, transfusion date: _____

Receive any live virus vaccine (MMR, Varicella, Shingles, Oral Polio, Yellow Fever, Smallpox, Typhoid) in the past year? Yes No

if yes, name of vaccine _____ date of vaccination _____

Prenatal Lab Results

Lab Test	Date	Negative	Positive	Equivocal	Not Done
Hepatitis C	___/___/___				
HBsAg	___/___/___				
HIV 1/2/0	___/___/___				
Syphilis screen	___/___/___				

To the best of my knowledge, the above patient is in good health and would be an appropriate donor to the milk bank.

Licensed Health Care Provider (please print): _____

Signature _____ Date _____

Fax completed form to 858-732-0870 or email to ucmilkbank@health.ucsd.edu

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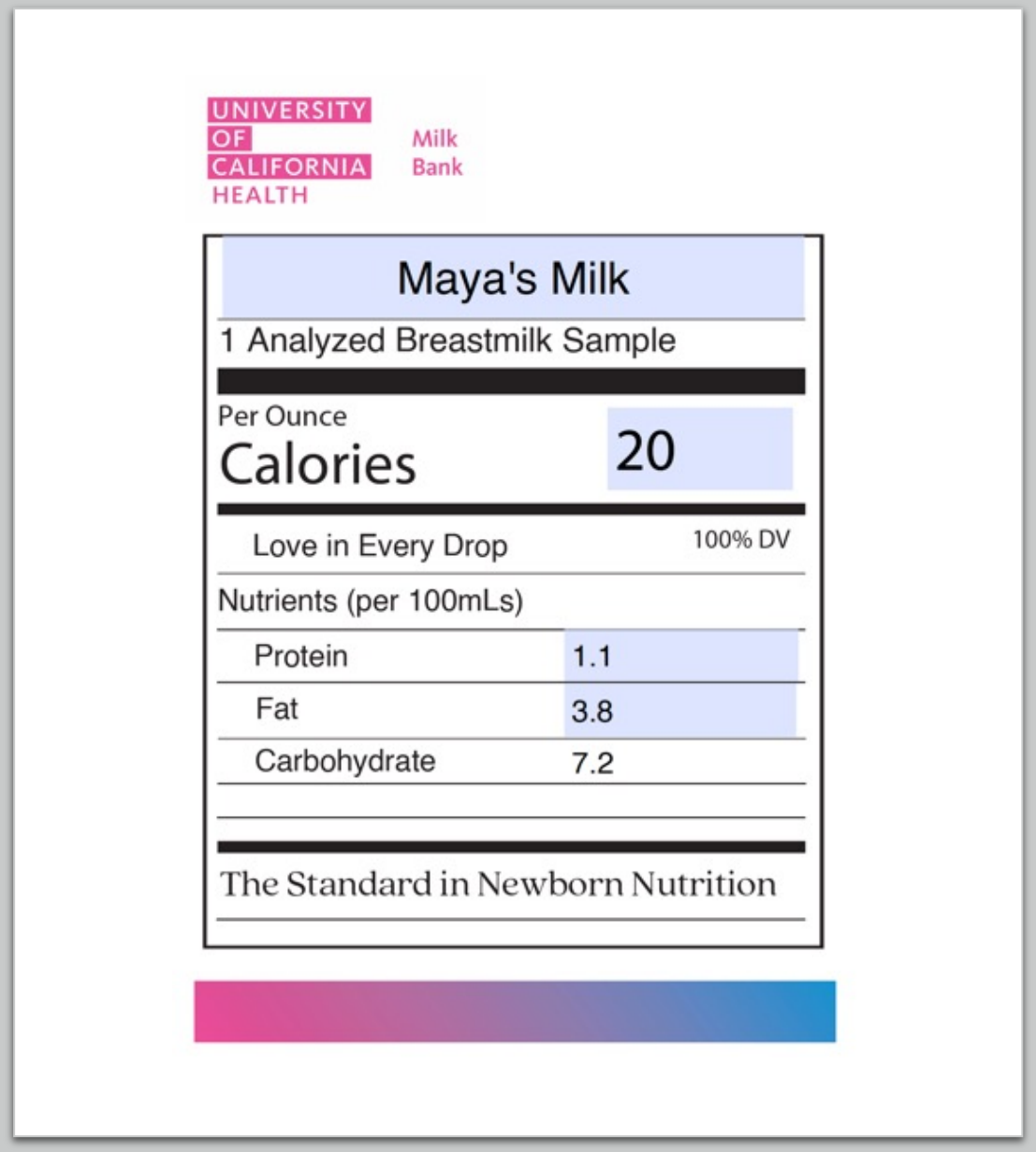
Blood Serology

- One time blood test
- Milk bank pays for all lab testing
- We accept milk for 12 months after blood test
- Blood testing:
  - HIV/HTLV
  - Hepatitis B/C
  - Syphilis
- Labs shared with donor
- Scripts composed for common issues
- Positive/false positive results testing
- Public Health reporting systems

Donor Engagement

- Reward donor for the milk gift with education/information
- Improves milk donation volume
- Nutrient facts
- Lab results
- Direct phone call for anything out of the ordinary
- Scripts for results
- Feedback about milk use/value
- Donor milestones
- Letter of commendation for military service members



University of California Health Milk Bank USA Pasteurized Mothers' Milk

Did you know your milk adjusts to the changing needs of your growing child?
Month by month the nutrients change with growing baby's needs, though daily milk production is remarkably stable. Keep in mind though that while milk for a toddler is no longer ideal for donation due to low protein, it is perfect for your child!

Expressing Milk for Donation

Breast milk not only changes over time, but also changes during the course of a feeding. Milk from a full breast starts out as low fat high lactose milk. As the breast is emptied, the fat content of the milk increases, and this results in higher calories. This fat-rich milk is particularly good for tiny preemies who need protein and calories to grow especially when they are tiny or sick. There are ways you can increase the fat content of your milk when pumping to donate.

Pump milk after you have fed your baby
If you pump from a full breast, pump until you soften and empty the breast. This will ensure that both the early - high lactose and late - high fat milk will be removed
Massage your breast before and during pumping to propel more fat into the milk

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Engaging The Milk Donor

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Milk Drop Off/Shipping

- Drop off - local donors
- FedEx - out of area
- Milk Giving events
- Milk Satellites (depots)

Join UC Health Milk Bank and San Diego Blood Bank for our annual Milk Giving Collection Event Saturday, November 5th from 9am – 1pm

If you have been holding off donating, now is a great time! This is a great opportunity to drop off your milk and empty your freezer before the upcoming holidays. We will be open at two locations this year for milk collection and blood screenings.

- Southern California Blood Bank Irvine location - 7 Corporate Park, Suite 130, Irvine, CA 92606
- San Diego Blood Bank Gateway location - 3636 Gateway Center Ave San Diego, CA 92102

Message your donor coordinator to schedule a drop off/blood test or scan QR code above to begin the registration process today!

Blood donation appointments and walk-in appointments will be available at both locations.
Give blood today to save lives tomorrow. All blood types needed urgently!

San Diego Blood Bank | Southern California Blood Bank, A division of San Diego Blood Bank

UNIVERSITY OF CALIFORNIA HEALTH Milk Bank

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Shipping Milk to Milk Bank

- We send cooler box
- Donor purchases dry ice
- Fed Ex comes to their house
- We pay FedEx
- Mon-Thurs only
- Rare mishaps with milk

Donor Milk Shipping and Handling Instructions-

UNIVERSITY OF CALIFORNIA HEALTH Milk Bank

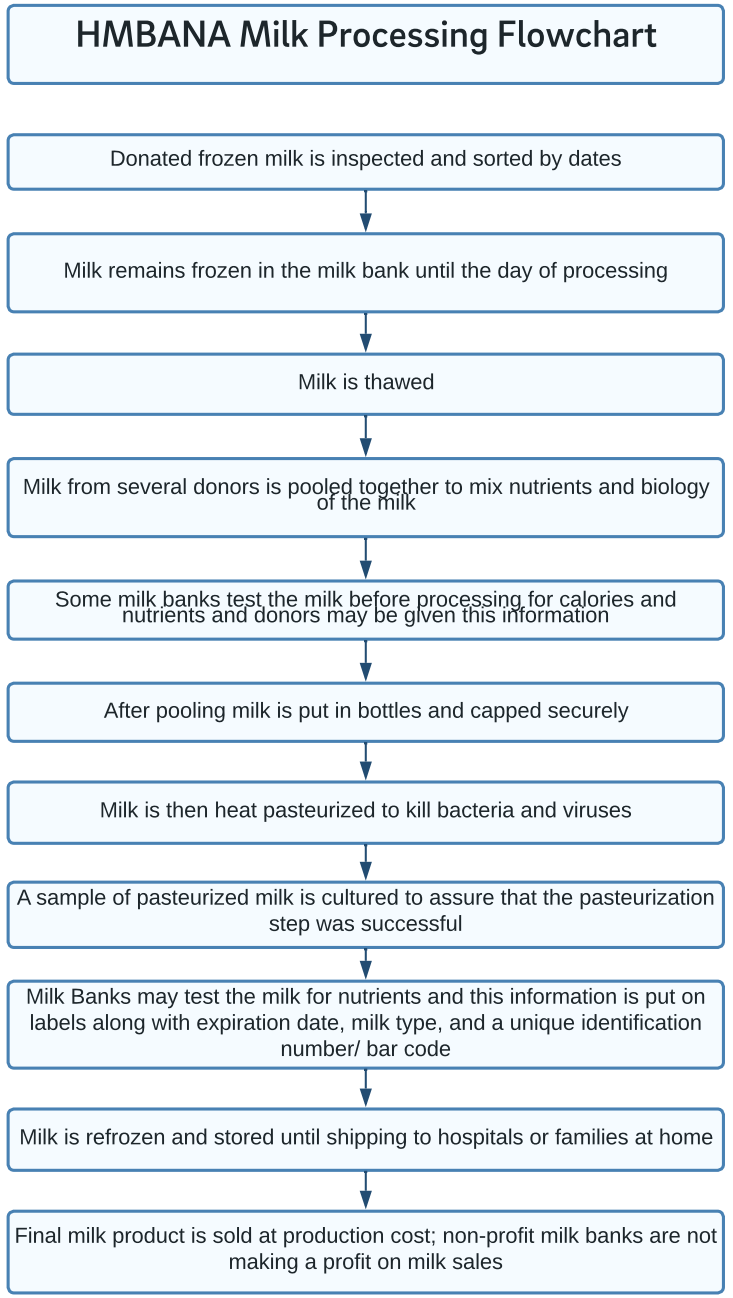
Packing Shipping Box –

- Inside your donor box is a packet with donor ID labels and return shipping label holder
- We can schedule your donation to be picked up at your location or you can take your donation package to a dry ice accepting FedEx location near you.
  - If you choose pickup- try to let us know through the portal the day before you are shipping and we will schedule your pickup and attach your labels on the portal
  - If you choose to take your donation to a FedEx location we can attach labels on portal and you can take to FedEx when you get a chance
- You will need to purchase dry ice to pack with your donation
- Shipment dates are limited to Mondays, Tuesdays, and Wednesdays (excluding holidays
- Place your milk bags or bottles **securely in plastic Ziploc bag, grocery store bags, or clean trash bags clearly labeled with your name and donor ID – or use the labels included in shipping packet**
- Add pump dates if individual bags are not clearly marked
- Pack milk tightly so that it does not shift during shipment, leaving 2-3 inches at the top for packing materials
- Use crumpled newspaper or paper bags to fill the space on top of the milk – and as a barrier between the milk and the dry ice
- Completely cover milk with an inch or two of paper to **ensure dry ice does not come directly in contact with milk containers**
- Add about 5 pounds of dry ice on taop of the paper and spread it out so that there are no large air pockets. You can add crumpled paper into any empty space in the box. Dry ice turns to carbon dioxide in 24 hours if there is too much empty space
- Put the lid on the cooler; DO NOT tape it closed, the dry ice vapor needs to be able to escape
- Cover the lid with the plastic lining
- Seal the outer box with packing tape - do not seal it airtight
- Apply FedEx label to the top of the box

University of California Health Milk Bank USA Pasteurized Mothers' Milk

Milk Laboratory and Processing

- Good Manufacturing Processes (GMP)
- Food safety
- Raw milk handling
- Microbiology
- Macronutrients
- Pooling
- Pasteurization
- Final product approval
- Documentation and record retention



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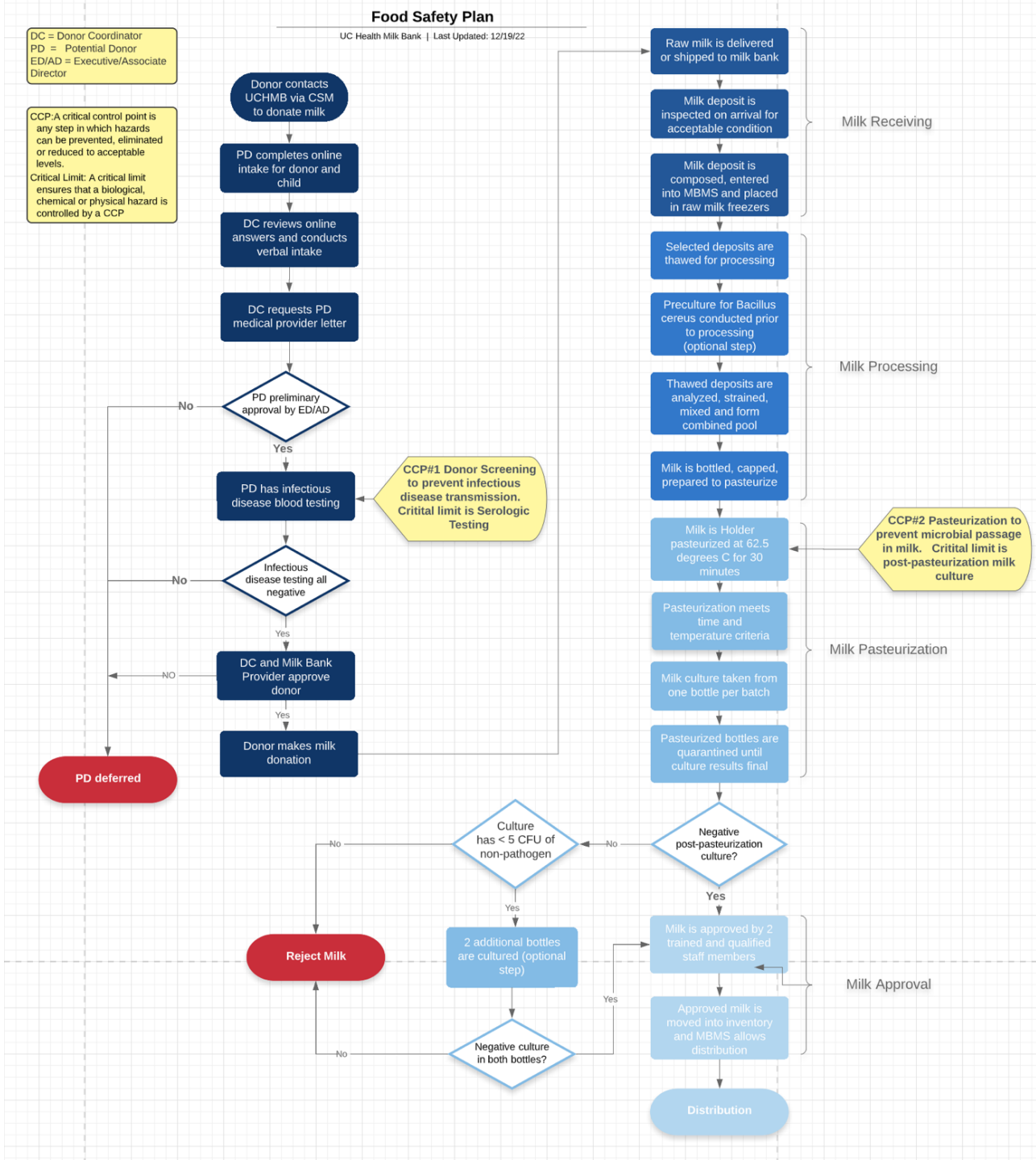
Good Manufacturing Processing (cGMP)

- Food safety team
- Commercial dishwashers
- FDA food safety rules
- Food safe equipment and cleaning chemicals
- Sanitary not sterile
- Strict pest control
- Constant surveillance of risks

University of California Health Milk Bank USA Pasteurized Mothers' Milk

Food Safety Plan

- Food Safety Leader
- Periodic meetings
- Clean milk lab
- Staff training
- Staff health and attire
- Adherence to SOPs
- Lab and equipment sanitization
- Accurate heat treatment
- Bacillus cereus management
- CLIA lab for milk cultures



Milk Intake

- Quarantine raw milk until donor approval
- System for milk outside of approval dates
- Milk up until 18 months of baby age
- Milk age up to 8 months
- Inspect all donations
- Create deposit (5-10 L)
- Bar code system to track and manage raw milk inventory

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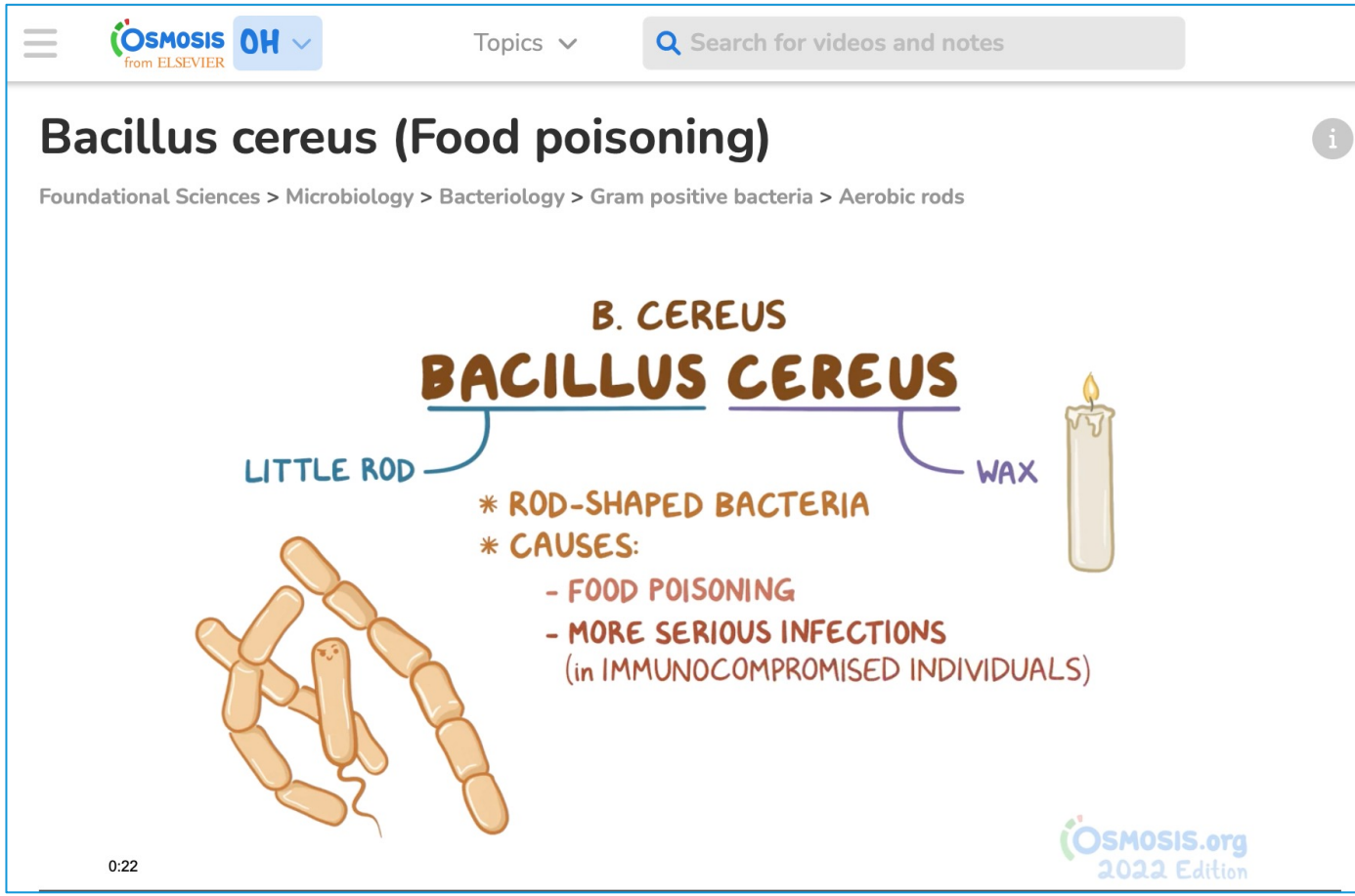
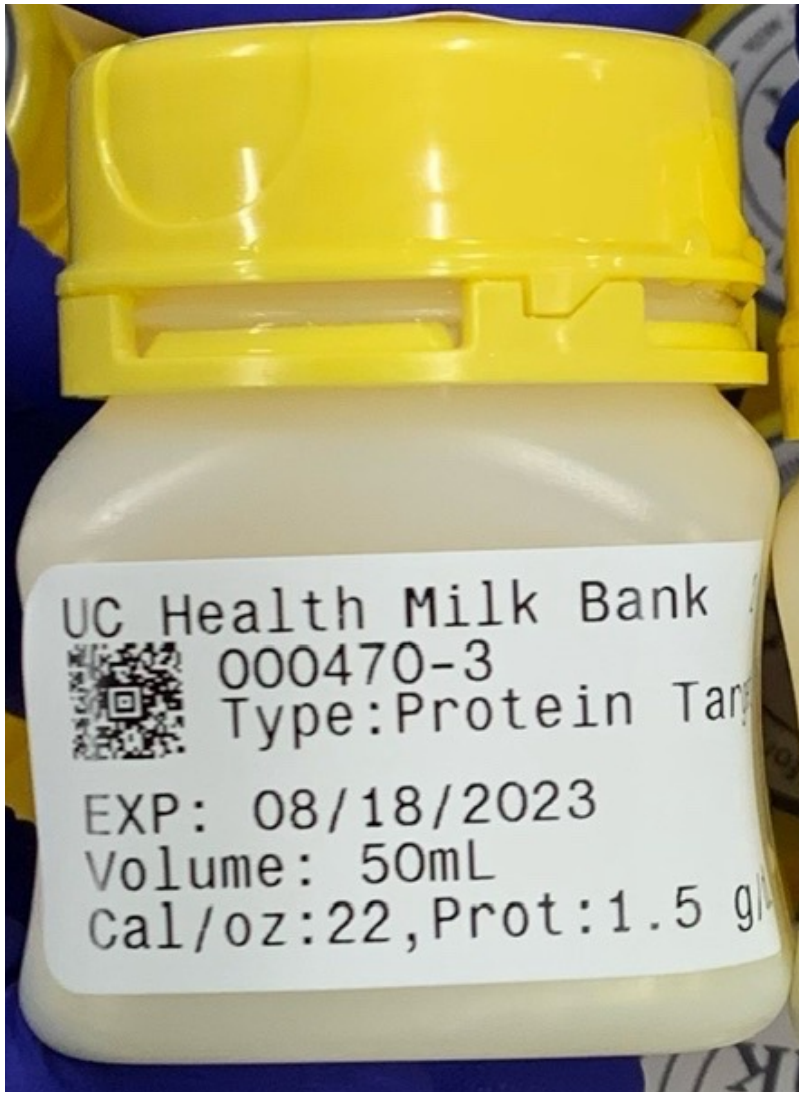
Microbiology

- Human milk bacteria and viral flora
- Pasteurization removes most of this bioburden
- Raw milk cultures not mandatory
- Bacillus cereus spores can survive pasteurization and bloom with heat treatment
- We do a pre-screen for Bacillus cereus
- Post pasteurization culture
- Milk is quarantined until culture are negative



Macronutrient Analysis

- Goal is optimal growth of VLBWs
- Analyze donor individual pool
- Analyze final pooled milk batch
- Product labeling includes Cals and protein
- Goal:
  - 20 Kcals/ounce
  - 1 gram protein/dL
  - Protein target 1.2 grams protein/dL
  - Bottle to bottle consistency



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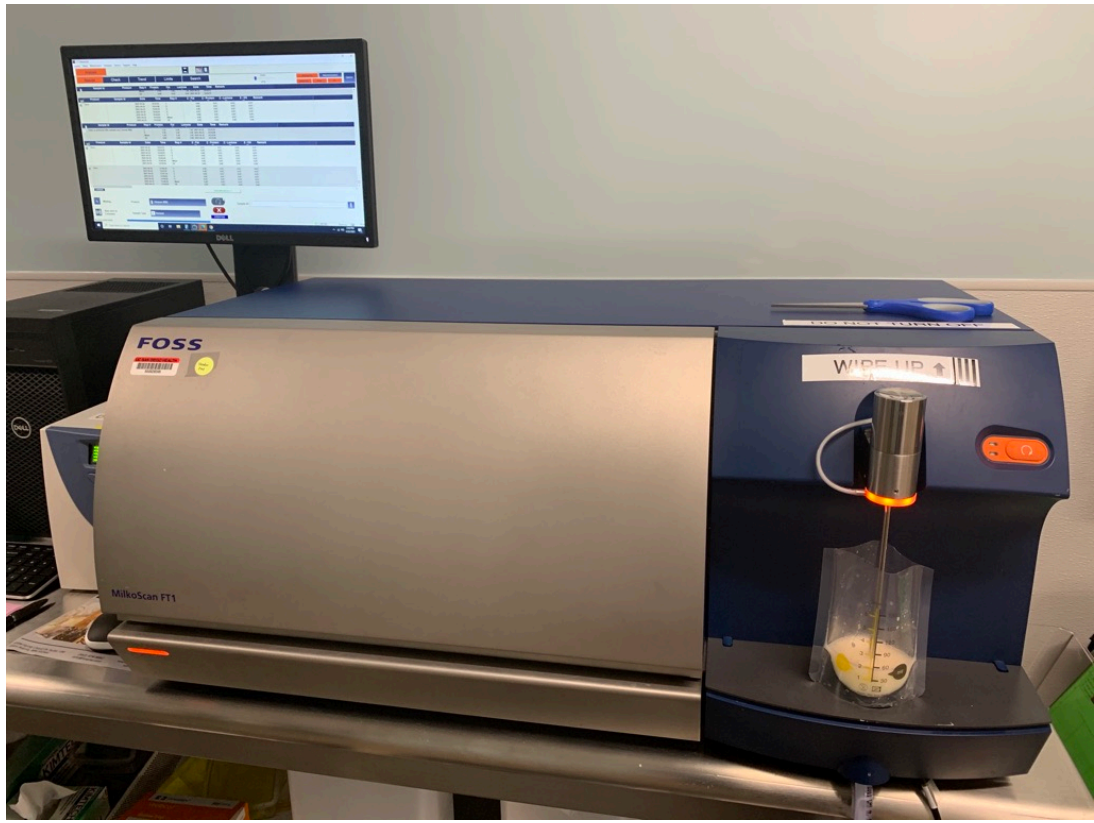
How Do We Analyze Milk?

- FOSS FT1 milk analyzer “Milk-O-Scan”
- Measures:
  - Protein
  - Fat
  - Lactose
- Calories are calculated (Atwater Equation)
- Pooling and milk nutrient analysis form a foundation of adequate nutrient provision and consistency for PDHM



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Pooling

Pooling 5+ donors:

- Improves nutrient consistency
- Improves HMO components
- Combines biology of all donors (antibodies)
- Minimize any inadvertent factors
- Reduce environmental elements

47 Liter pool

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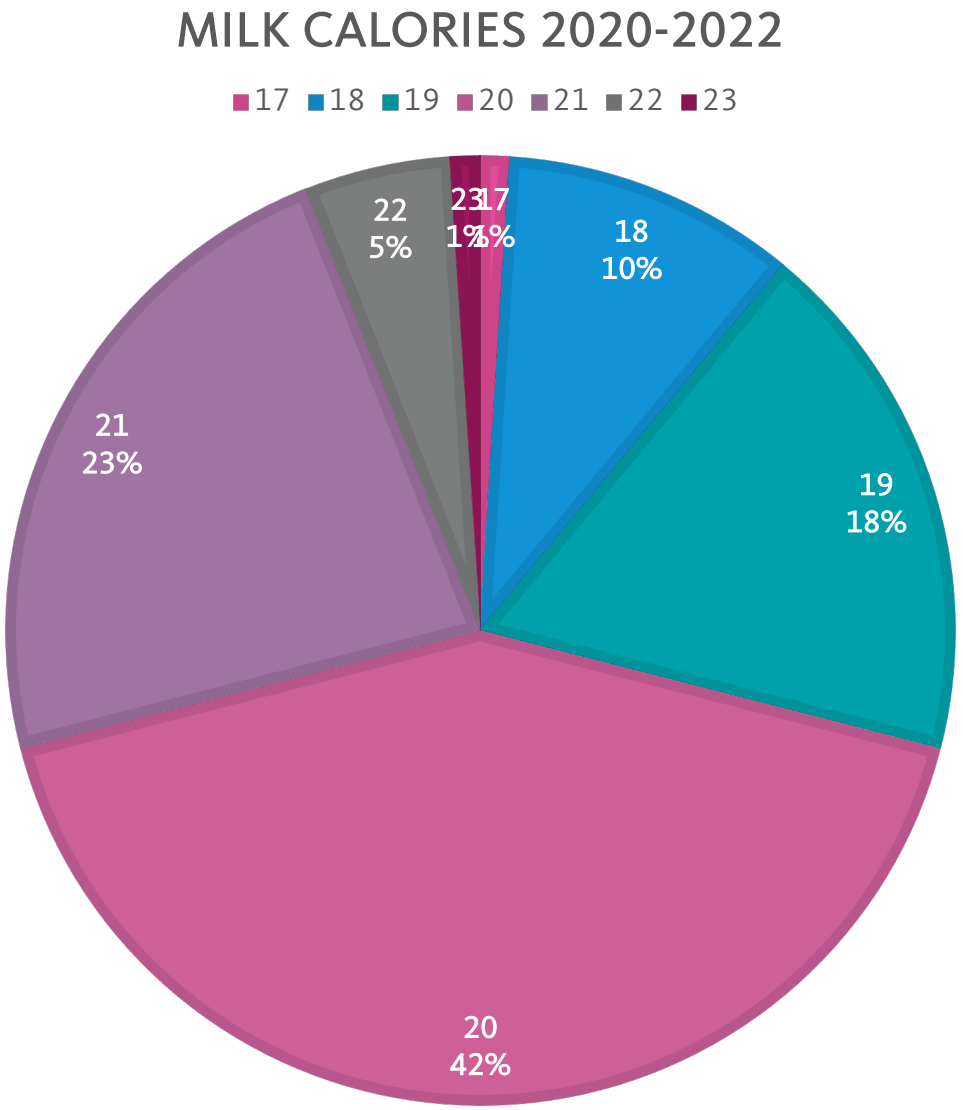
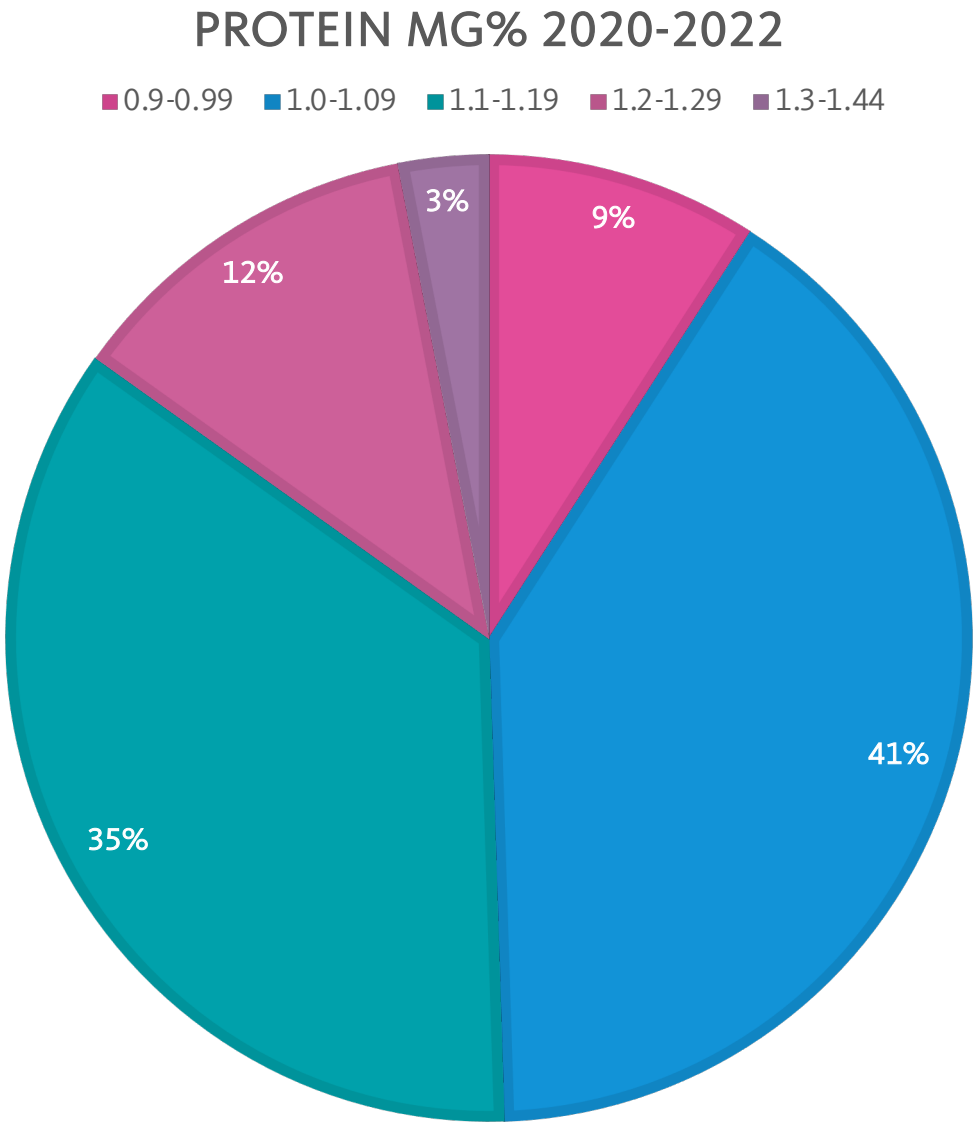
Pooled milk (5-8 donors) is 18-22 Kcals/ounce



Pooled milk (5-8 donors) has total protein of 0.9-1.3 mg/dL



Milk Type	Suggested Use	Bottle Size mLs	Bottle Size oz	Calorie content / oz	Protein content / oz
Outpatient	Outpatient	100	3.38	18-19 Kcals/oz	No target
		200	6.76	18-19 Kcals/oz	No target
Standard	NICU/Hospital	50	1.69	≥ 20 Kcals/oz	≥ 1.0 gm/dL
		100	3.38	≥ 20 Kcals/oz	≥ 1.0 gm/dL
		200	6.76	≥ 20 Kcals/oz	≥ 1.0 gm/dL
Protein Target	NICU/Hospital	50	1.69	≥ 20 Kcals/oz	≥ 1.2 gm/dL
		100	3.38	≥ 20 Kcals/oz	≥ 1.2 gm/dL

Pasteurization

Raw Milk is:

- Poured through a sieve
- Pooled
- Mechanically mixed
- Mechanically dispensed into bottles
- Capped
- Pasteurized
- Cooled
- Cultured
- Quarantined

YOLO?

Pasteurization

Raw Milk is:

- Poured through a sieve
- Pooled
- Mechanically mixed
- Mechanically dispensed into bottles
- Capped
- Pasteurized
- Cooled
- Cultured
- Quarantined

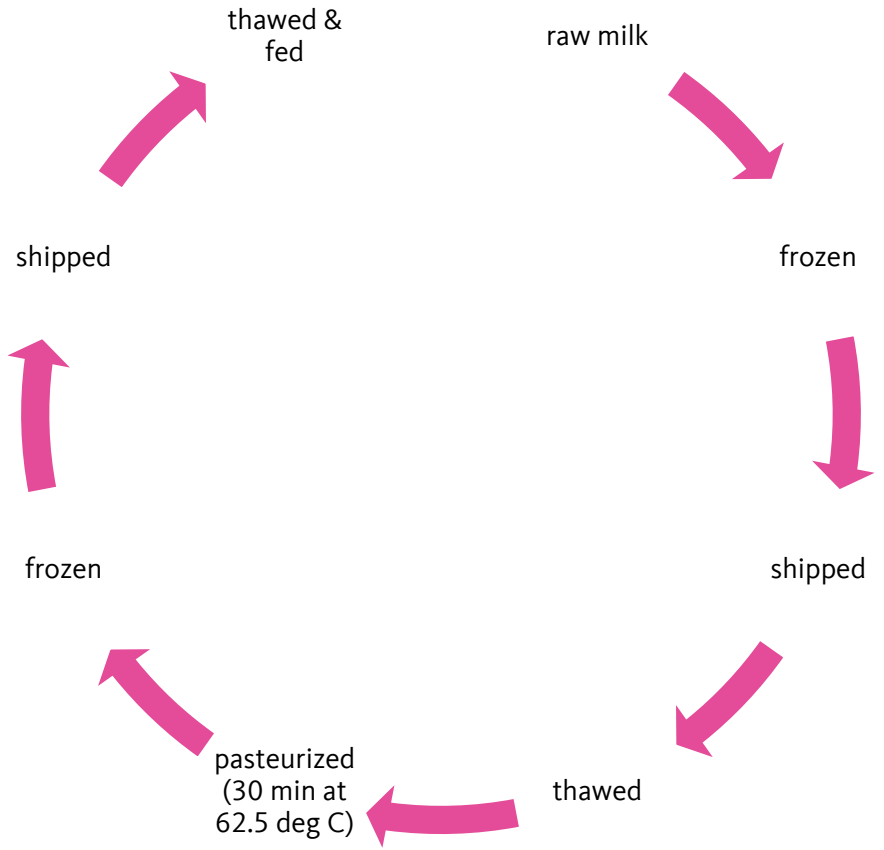
YOLO County!

University of California Health Milk Bank USA Pasteurized Mothers' Milk

How does processing impact pasteurized donor human milk nutrients and biology?

Intact:

- ✓ Macronutrients
- ✓ Micronutrients, Iron
- ✓ Vit A, B6
- ✓ IgG
- ✓ IgA, sIgA
- ✓ IL and TGF
- ✓ Adiponectin
- ✓ Ghrelin
- ✓ Insulin
- ✓ Amylase
- ✓ Lactoferrin
- ✓ Human Milk Oligosaccharides
- ✓ Covid vaccine antibodies!



Abolished:

- ✕ Live cells
- ✕ Bacteria
- ✕ Viruses (mostly)
- ✕ Lipase

Reduced

- ↓ IgM
- ↓ Lysozyme
- ↓ EPO
- ↓ Zinc
- ↓ Leptin
- ↓ Vit C

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Hospital Milk Sales/Logistics

- Gaining traction
- Contracting
- Product selection
- Ordering
- Communication
- Shipping/delivery

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USA
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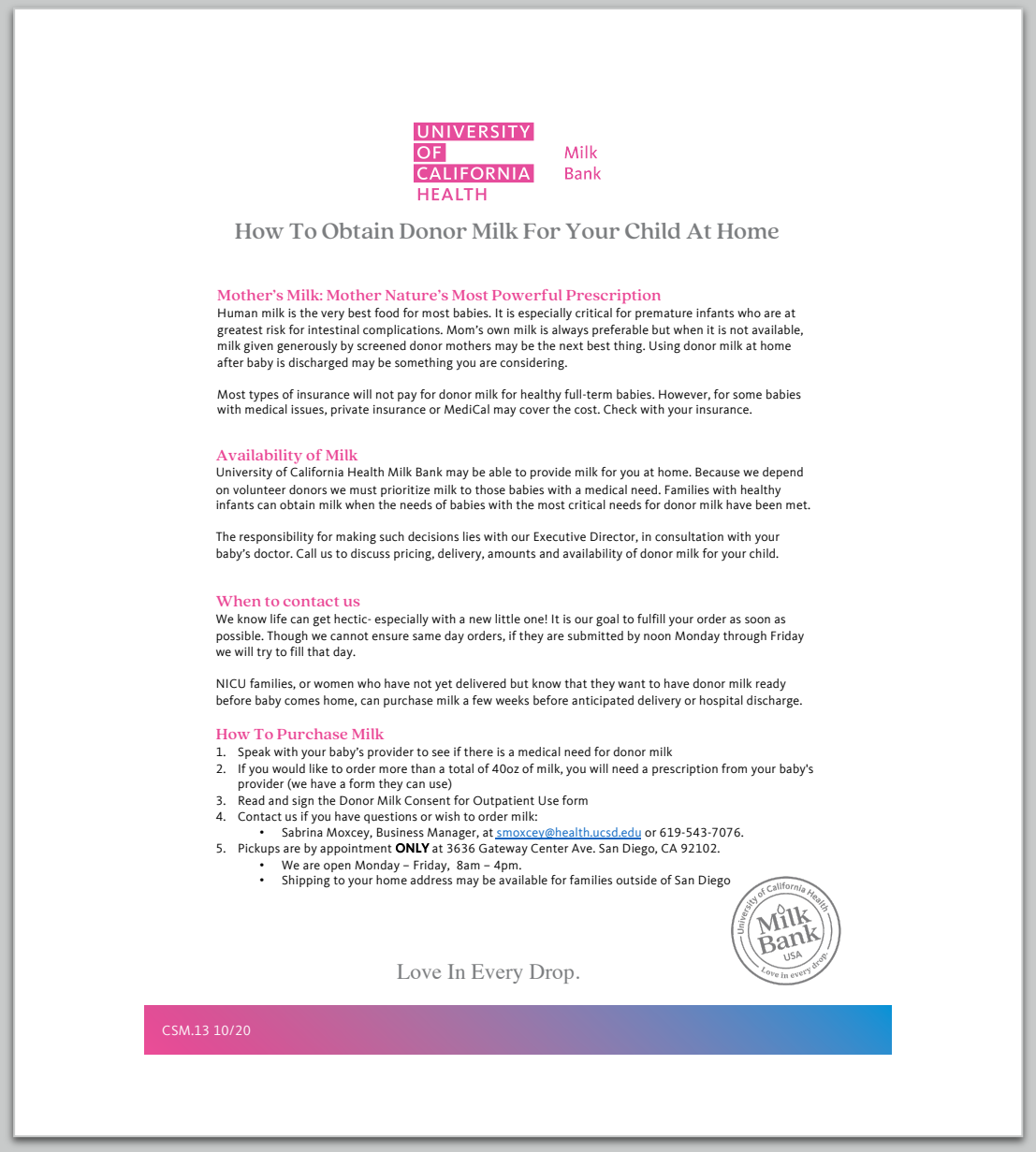
Home Sales

- Reaching customers
- Insurance coverage
- Pricing
- Consent (opt)
- Physician Rx for milk ~~(opt)~~
- Logistics
- Consider e-commerce



UNIVERSITY OF CALIFORNIA HEALTH Milk Bank

How To Obtain Donor Milk For Your Child At Home

Mother's Milk: Mother Nature's Most Powerful Prescription

Human milk is the very best food for most babies. It is especially critical for premature infants who are at greatest risk for intestinal complications. Mom's own milk is always preferable but when it is not available, milk given generously by screened donor mothers may be the next best thing. Using donor milk at home after baby is discharged may be something you are considering.

Most types of insurance will not pay for donor milk for healthy full-term babies. However, for some babies with medical issues, private insurance or MediCal may cover the cost. Check with your insurance.

Availability of Milk

University of California Health Milk Bank may be able to provide milk for you at home. Because we depend on volunteer donors we must prioritize milk to those babies with a medical need. Families with healthy infants can obtain milk when the needs of babies with the most critical needs for donor milk have been met.

The responsibility for making such decisions lies with our Executive Director, in consultation with your baby's doctor. Call us to discuss pricing, delivery, amounts and availability of donor milk for your child.

When to contact us

We know life can get hectic- especially with a new little one! It is our goal to fulfill your order as soon as possible. Though we cannot ensure same day orders, if they are submitted by noon Monday through Friday we will try to fill that day.

NICU families, or women who have not yet delivered but know that they want to have donor milk ready before baby comes home, can purchase milk a few weeks before anticipated delivery or hospital discharge.

How To Purchase Milk

1. Speak with your baby's provider to see if there is a medical need for donor milk
2. If you would like to order more than a total of 40oz of milk, you will need a prescription from your baby's provider (we have a form they can use)
3. Read and sign the Donor Milk Consent for Outpatient Use form
4. Contact us if you have questions or wish to order milk:
   - Sabrina Moxcey, Business Manager, at smoxcey@health.ucsd.edu or 619-543-7076.
5. Pickups are by appointment **ONLY** at 3636 Gateway Center Ave. San Diego, CA 92102.
   - We are open Monday – Friday, 8am – 4pm.
   - Shipping to your home address may be available for families outside of San Diego

Love In Every Drop.

CSM.13 10/20

University of California Health Milk Bank USA Pasteurized Mothers' Milk

What Families Purchase PDHM for Home Use?

- Bridge milk after delivery
- Take home packs from hospital
- Formula intolerance
- Complex GI conditions
- Failure to thrive
- Adoption/Surrogacy
- Mother unable to breastfeed
- Exclusively breastfeeding women living with HIV *

"I am beyond grateful for the UC Health Milk Bank for providing donor breast milk to infants like my daughter, Alaya. She was intolerant to most, if not all, formulas on the shelf and was fussy most of the time for her first 2 months of life. Meanwhile, I was not producing enough milk. She is now a changed baby and happy all of the time; Breast truly is best!" — Alejandra

When PDHM is Infant's Exclusive Diet

- Is there the supply?
- Where will the milk be sold?
- Do we provide low/no cost milk?
- Very expensive: $6K /month
- Nutrient provision
- Vitamin/minerals may be low in mature milk (not fortified)
- Insurance coverage is tough

Donor Milk Fed Infants May Need Vitamin or Mineral Supplements

UNIVERSITY OF CALIFORNIA HEALTH Milk Bank

Pasteurized donor milk has much of the biological and many of the beneficial properties of mother's milk. But some minerals and vitamins like Vitamin C and Zinc can be low in the milk.

If your baby is getting donor milk from a milk bank, they may need extra nutrients by giving them a vitamin and mineral supplement. If your baby is also getting mother's own milk or infant formula, or eating table food this supplement may not be necessary.

Discuss with your provider if your baby needs a supplement and which supplement(s) is best for your baby.

Recommended Daily Allowance (RDA) for infants 0-6 months old:

- Vitamin D: 400 IU/day (10 mcg)
- Vitamin C: 40 mg/day
- Zinc: 2 mg/day

Examples of infant products that supply Vitamin D, Vitamin C, and Zinc (not a complete list):

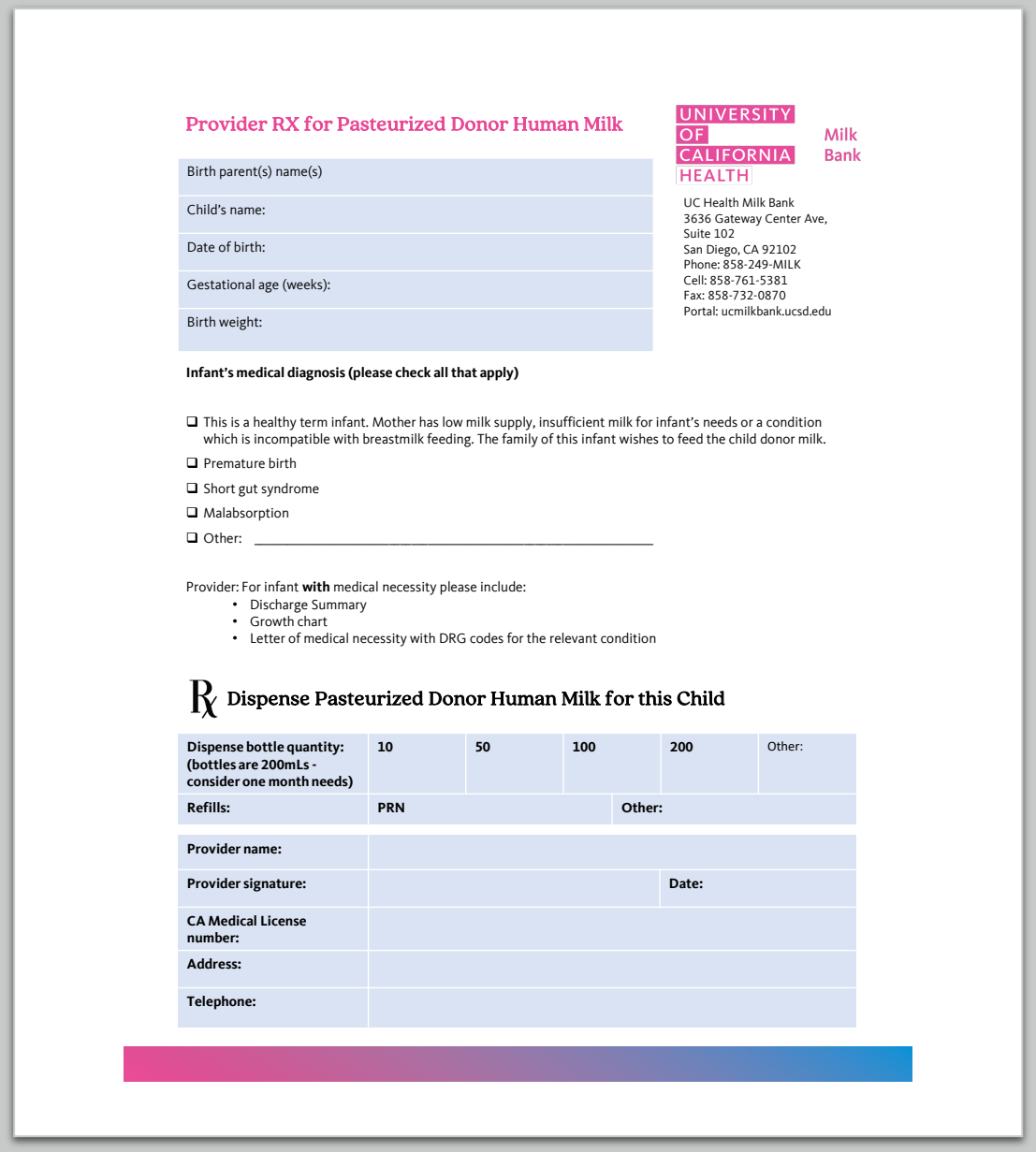
- Kiddivit Baby Zinc with elderberry, C & D
- Wellements Baby Immune Support & Vitamins
- Zarabee's Immune Support and Vitamins

For more information about vitamins and minerals visit CDC. gov

Love in every drop

PDHM Prescription

- Simple Rx for healthy term infant
- Letter of necessity (PCP or specialist) and insurance pre-approval for medially fragile infant
- MediCaid* and TriCare have donor milk policies



Provider RX for Pasteurized Donor Human Milk

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Birth parent(s) name(s)
Child's name:
Date of birth:
Gestational age (weeks):
Birth weight:

UC Health Milk Bank
3636 Gateway Center Ave,
Suite 102
San Diego, CA 92102
Phone: 858-249-MILK
Cell: 858-761-5381
Fax: 858-732-0870
Portal: ucmilkbank.ucsd.edu

Infant's medical diagnosis (please check all that apply)

- ❑ This is a healthy term infant. Mother has low milk supply, insufficient milk for infant's needs or a condition which is incompatible with breastmilk feeding. The family of this infant wishes to feed the child donor milk.
- ❑ Premature birth
- ❑ Short gut syndrome
- ❑ Malabsorption
- ❑ Other: _____

Provider: For infant **with** medical necessity please include:

- Discharge Summary
- Growth chart
- Letter of medical necessity with DRG codes for the relevant condition

Rx Dispense Pasteurized Donor Human Milk for this Child

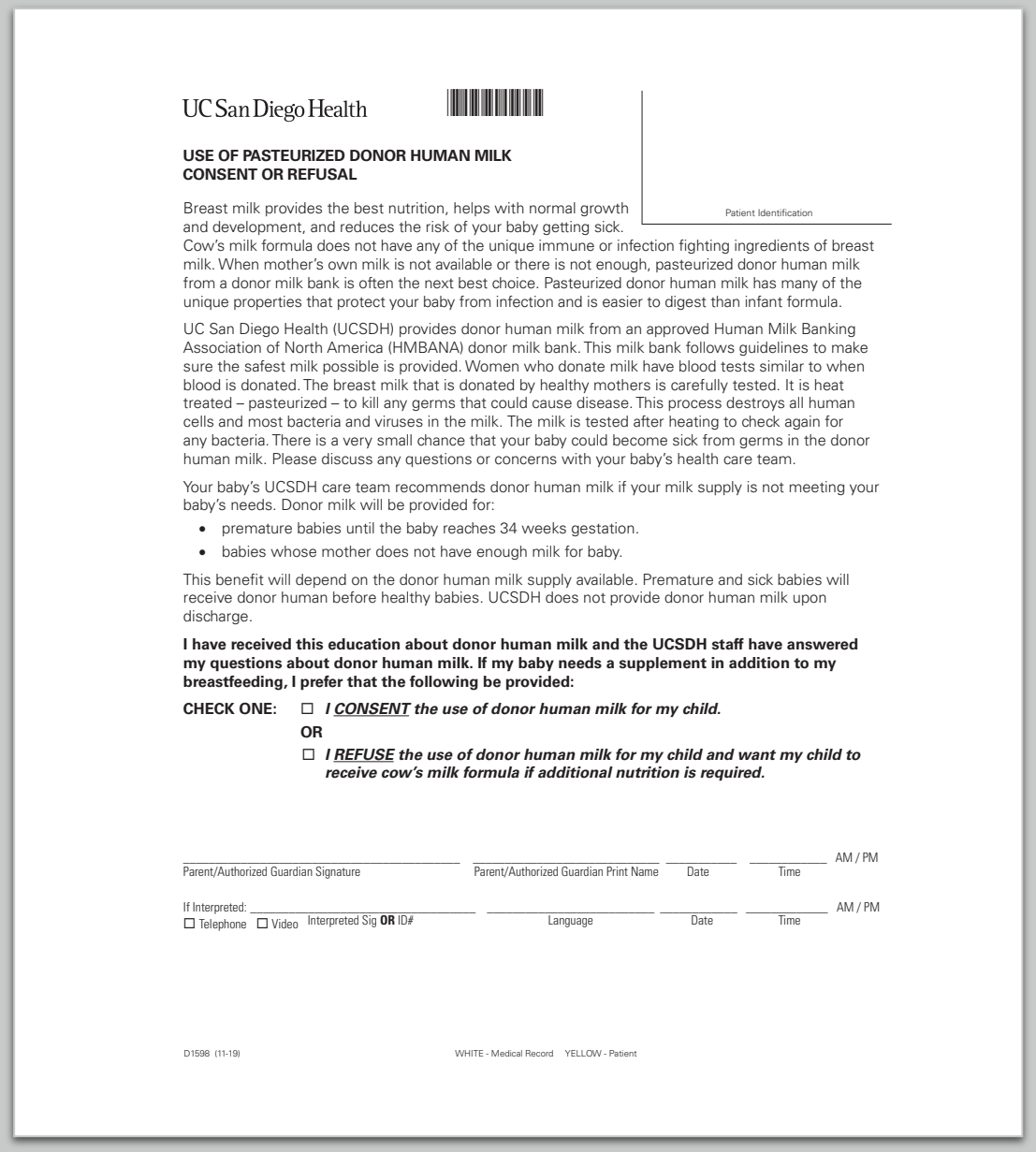
Dispense bottle quantity: (bottles are 200mLs - consider one month needs)	**10**	**50**	**100**	**200**	Other:
Refills:	**PRN**		**Other:**		

Provider name:		
Provider signature:		**Date:**
CA Medical License number:		
Address:		
Telephone:		

University of California Health Milk Bank USA Pasteurized Mothers' Milk

Consent For PDHM Use at Home

- Optional step
- Educational
- In case of recall may need to contact
- Continue to stay in contact with families



UC San Diego Health

USE OF PASTEURIZED DONOR HUMAN MILK CONSENT OR REFUSAL

Patient Identification

Breast milk provides the best nutrition, helps with normal growth and development, and reduces the risk of your baby getting sick. Cow's milk formula does not have any of the unique immune or infection fighting ingredients of breast milk. When mother's own milk is not available or there is not enough, pasteurized donor human milk from a donor milk bank is often the next best choice. Pasteurized donor human milk has many of the unique properties that protect your baby from infection and is easier to digest than infant formula.

UC San Diego Health (UCSDH) provides donor human milk from an approved Human Milk Banking Association of North America (HMBANA) donor milk bank. This milk bank follows guidelines to make sure the safest milk possible is provided. Women who donate milk have blood tests similar to when blood is donated. The breast milk that is donated by healthy mothers is carefully tested. It is heat treated – pasteurized – to kill any germs that could cause disease. This process destroys all human cells and most bacteria and viruses in the milk. The milk is tested after heating to check again for any bacteria. There is a very small chance that your baby could become sick from germs in the donor human milk. Please discuss any questions or concerns with your baby's health care team.

Your baby's UCSDH care team recommends donor human milk if your milk supply is not meeting your baby's needs. Donor milk will be provided for:

- premature babies until the baby reaches 34 weeks gestation.
- babies whose mother does not have enough milk for baby.

This benefit will depend on the donor human milk supply available. Premature and sick babies will receive donor human before healthy babies. UCSDH does not provide donor human milk upon discharge.

I have received this education about donor human milk and the UCSDH staff have answered my questions about donor human milk. If my baby needs a supplement in addition to my breastfeeding, I prefer that the following be provided:

CHECK ONE: ☐ ***I CONSENT the use of donor human milk for my child.***

OR

☐ ***I REFUSE the use of donor human milk for my child and want my child to receive cow's milk formula if additional nutrition is required.***

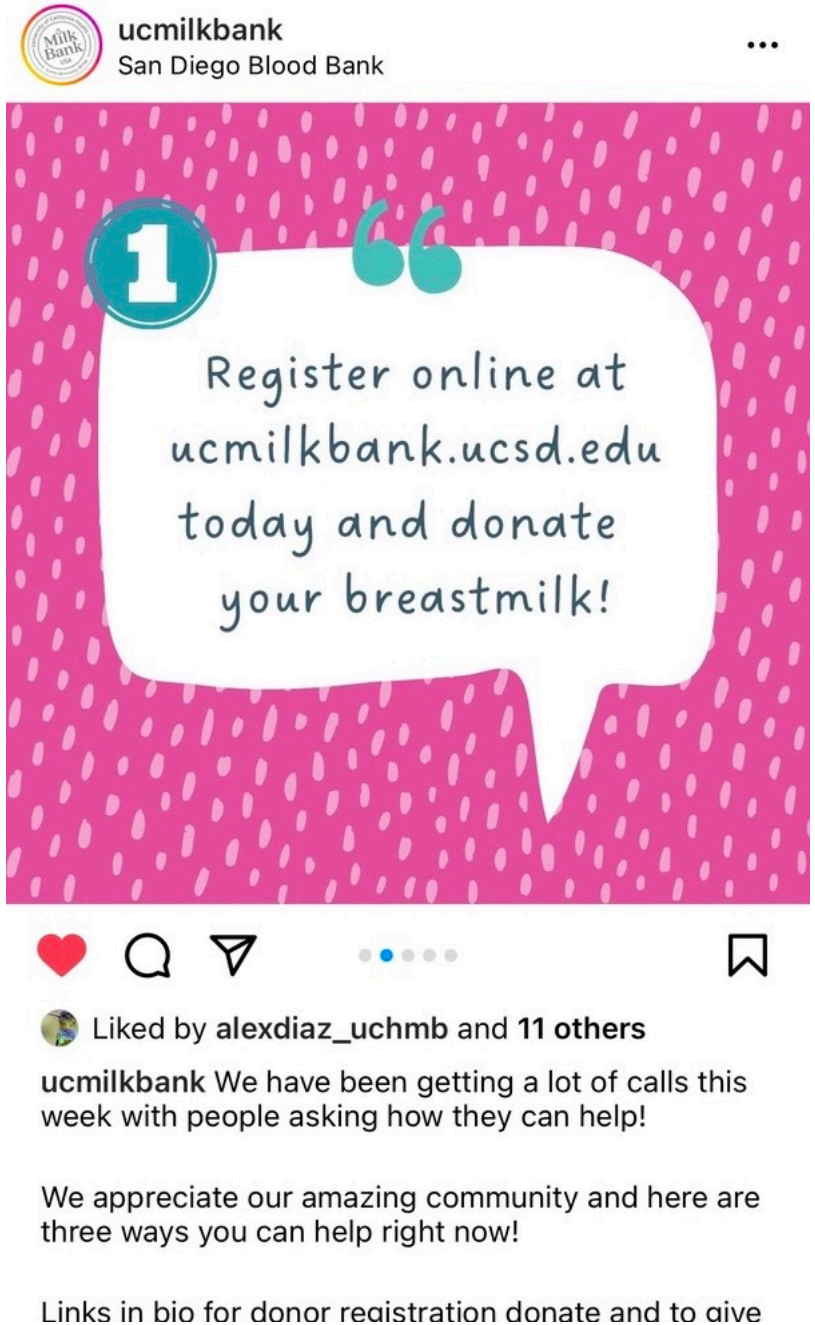
Parent/Authorized Guardian Signature | Parent/Authorized Guardian Print Name | Date | Time AM / PM

If Interpreted: ☐ Telephone ☐ Video Interpreted Sig **OR** ID# | Language | Date | Time AM / PM

D1598 (11-19) WHITE - Medical Record YELLOW - Patient

University of California Health Milk Bank USA Pasteurized Mothers' Milk

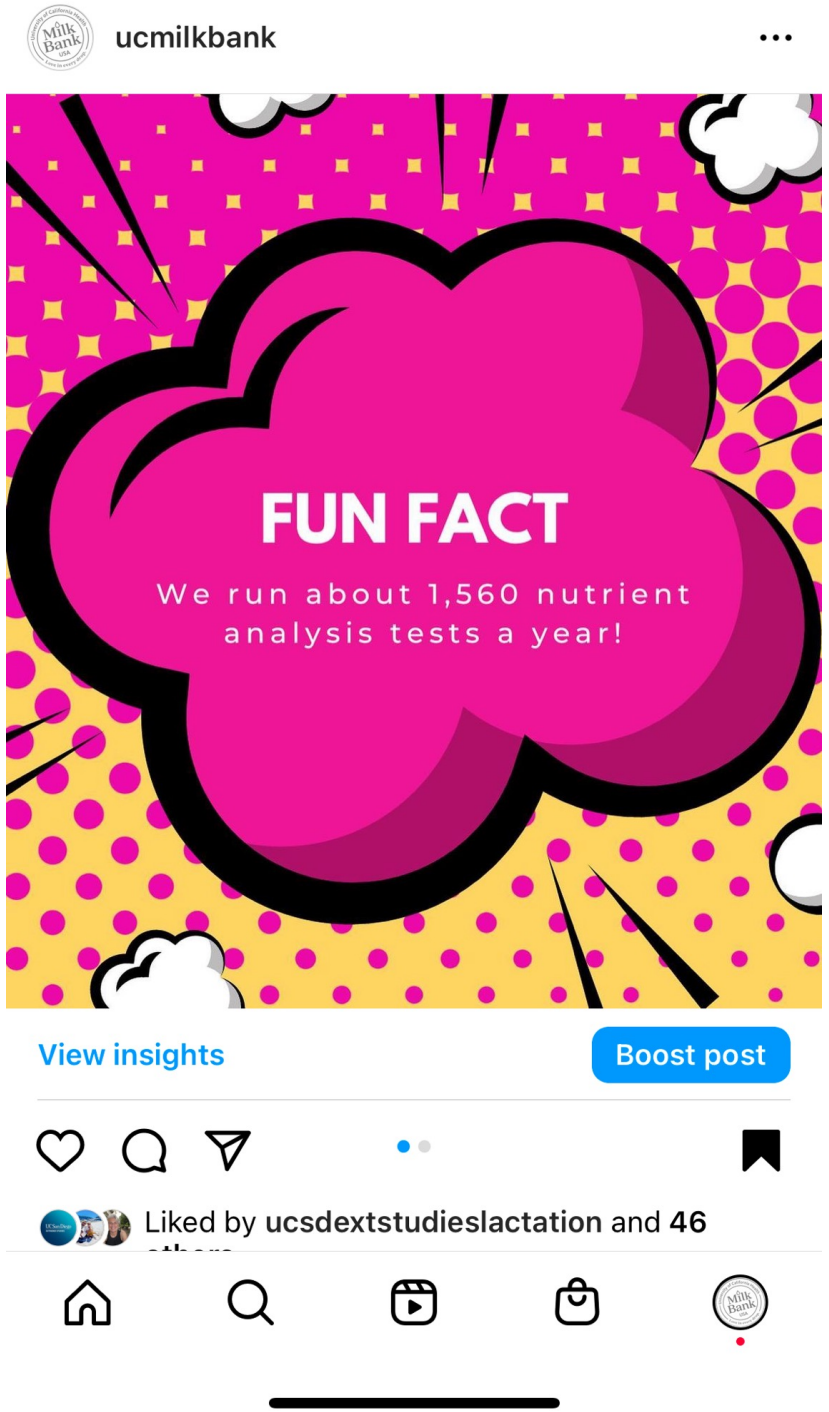
4:00
Instagram
ucmilkbank
San Diego Blood Bank
3
Donate Financially!
Liked by alexdiaz_uchmb and 11 others
ucmilkbank We have been getting a lot of calls this week with people asking how they can help!


ucmilkbank
San Diego Blood Bank
1
Register online at ucmilkbank.ucsd.edu today and donate your breastmilk!
Liked by alexdiaz_uchmb and 11 others
ucmilkbank We have been getting a lot of calls this week with people asking how they can help!
We appreciate our amazing community and here are three ways you can help right now!
Links in bio for donor registration donate and to give

3:59
Instagram
ucmilkbank
San Diego Blood Bank
2
Post and share information on milk banking!
Liked by alexdiaz_uchmb and 11 others
ucmilkbank We have been getting a lot of calls this week with people asking how they can help!

Unexpected benefits

- The benefit of donation to the donors
- Family involvement in donation
- Healthcare workers donating
- Families who used PDHM returning to donate
- Bereaved donor families
- Thankful outpatient families
- Community engagement and support



University of California Health Milk Bank USA Pasteurized Mothers' Milk

Closing Thoughts

- PDHM is key for the outcomes of premature and ill babies when mothers' own milk is not available
- All families in the NICU who need donor milk should have access
- To meet this goal we will need more milk
- Donor screening helps to assure a safe product
- Donor engagement helps to assure ongoing donations/growth
- Tight systems for milk processing is key
- IT systems will help efficiency and outreach

Thank you to our generous supporters!

First 5 San Diego

IEBfC inland empire breastfeeding coalition

SAN DIEGO COUNTY BREASTFEEDING COALITION © 1995

Imperial County Breastfeeding Coalition

The Johnson Family

SanDiegoCounty.gov

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