

ESTABLISHING THE FIRST HUMAN MILK BANK IN VIET NAM



In the Da Nang Hospital for Women and Children

Why human milk banks?

Newborn babies need the best care possible to survive and thrive, including one of the most sophisticated personalized medicines available: human milk. Mother's milk fosters strength, a healthy metabolism, good digestion, a robust immune system, and many more positive outcomes. Nothing else can support immediate survival, short-term gains, or lifelong benefits in the same way.

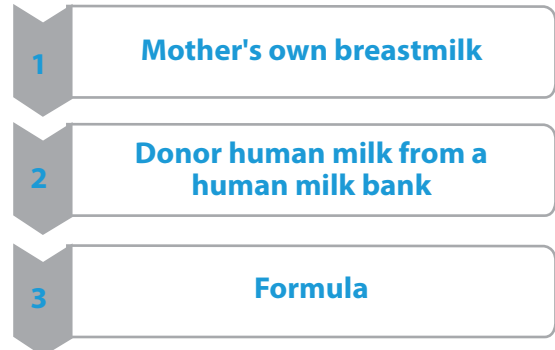
In addition to supporting ideal growth and development for all breastfed babies, The Lancet estimates that optimal breastfeeding practices worldwide could prevent more than 820,000 deaths in children under 5 every year.*

However, not all women are able to provide their own breastmilk to feed their babies; reasons include being too sick to breastfeed or taking medication that is not recommended while breastfeeding. In addition, vulnerable newborns—such as those orphaned or born underweight, premature, or with serious illness—may not have access to their own mother's milk. In these instances, the World Health Organization (WHO) recommends providing donor human milk to ensure infants receive the lifesaving benefits of breastmilk (see Graphic 1).

Human milk banks promote optimal infant health for at-risk infants when mothers are unable to provide their own milk. Milk is donated by volunteer lactating mothers who have passed a health screening. After donation, milk is processed, stored, and distributed following strict procedures to provide safe, high-quality donor milk and meet the needs of newborns at risk of malnutrition or infection.

Until recently, without a single human milk bank in the country, infants in Viet Nam did not have access to this life-saving intervention. Increasing awareness around the benefits of donor milk, establishing supportive policies, and integrating human milk banks into health systems are important steps towards ensuring access to safe donor human milk for infants who need it most.

Graphic 1: WHO ranking of feeding options for at-risk newborns



* In the 75 countries where 95% of under 5 deaths occur.

Project Goals:

- ✓ To establish a human milk bank in the Da Nang Hospital for Women and Children to improve access to donor human breastmilk for 3,000 - 4,000 at-risk infants annually
- ✓ To provide a basis for developing national human milk bank guidelines and establishing a human milk bank network throughout the country
- ✓ To integrate human milk banking systems with breastfeeding promotion, with the aim to increase access to human milk for all infants

Human milk bank pilot in Da Nang

Over the past several years, the Da Nang Department of Health has improved breastfeeding and early essential newborn care practices. Now, the department is supporting the operation of Viet Nam's first human milk bank, which opened in early 2017 at the Da Nang Hospital for Women and Children. Of the hospital's 15,000 annual deliveries, an estimated 3,000 - 4,000 newborns are at risk of malnutrition or infection and would benefit immensely from access to donor human milk. Alive & Thrive and PATH began supporting the Da Nang Hospital for Women and Children at the end of 2015 to pilot this groundbreaking facility and lay the foundation for other similar institutions across the country.

With technical expertise and support from Alive & Thrive and PATH, and substantial commitment from the Da Nang Hospital for Women and Children, the first human milk bank in Viet Nam has opened using international-standard, high-quality equipment. Alive & Thrive and PATH provided technical assistance for the development of stringent standard operating procedures and guidelines to direct the operation of the human milk bank. Alive & Thrive and PATH also facilitated shared learning between the Da Nang Hospital for Women and Children and other existing human milk banks in Scotland and Norway, which helped the Da Nang milk bank establish strong procedures and staff capacity.



Human milk bank staff member divides pasteurized donor human milk into portions ready for recipient babies. Photo credit: Alive & Thrive



A low birthweight baby receives human milk through a feeding tube at the Da Nang Hospital for Women and Children. Photo credit: Alive & Thrive



Training for hospital staff has enabled the human milk bank to become an integral part of postnatal and neonatal care at the Da Nang Hospital for Women and Children. Health staff assigned to the milk bank have been trained to test, pasteurize, store, and track donated milk, ensuring the breastmilk is safe to feed to at-risk newborns. Doctors and nurses in the postnatal and neonatal wards have been trained to encourage breastfeeding mothers to donate excess milk to the bank and how to prescribe donor human milk to at-risk infants whose mothers cannot breastfeed. Communication materials have been distributed throughout the hospital to raise awareness about the human milk bank's purpose, encourage potential breastmilk donors, and create demand for donor human milk among those who need it.

Alive & Thrive and PATH have also worked with the hospital to establish data collection systems that monitor activity during all steps of the process to ensure the human milk bank is operating effectively. This monitoring data will also indicate whether the human milk bank is recruiting enough donors to meet the demand for donor milk - a key to the success of this pilot.

In addition to improving access to donor human milk for 3,000 - 4,000 at-risk children annually, the experience in Da Nang will demonstrate the feasibility of this approach. It will serve as a starting point for developing national human milk bank guidelines and establishing a human milk bank network throughout the country, with the potential to save thousands of lives and ensure healthy growth and development.

Infants who benefit from a human milk bank

- ✓ Pre-term
- ✓ Low birth weight
- ✓ Born to HIV-positive mothers who opt out, or are unable to breastfeed
- ✓ Severely malnourished
- ✓ Orphans

April 2017

Sources:

Arnold LD. Global health policies that support the use of banked donor human milk: a human rights issue. *International Breastfeeding Journal*. 2006;1:26.

PATH. *Strengthening Human Milk Banking: A Global Implementation Framework*. Version 1.1. Seattle, Washington, USA: Bill & Melinda Gates Foundation Grand Challenges initiative, PATH; 2013

The Lancet, "Breastfeeding Series," 2016.

Victora, Cesar G et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *The Lancet*. 2016 January; 387 (10017); 475 – 490. Available from: www.thelancet.com.

WHO. Breastfeeding: Global Targets 2025. Available at: http://www.who.int/nutrition/global-target-2025/infographic_breastfeeding.pdf. Accessed February 23, 2016

WHO. Guidelines on optimal feeding of low birth-weight infants in low- and middle-income countries. Geneva, World Health Organization; 2011. Available from www.who.int/elena/titles/full_recommendations/feeding_lb/en.



Human Milk Bank

DA NANG CITY

Alive & Thrive is an initiative to save lives, prevent illness, and ensure healthy growth and development through improved breastfeeding and complementary feeding practices. Alive & Thrive is funded by the Bill & Melinda Gates Foundation and the governments of Canada and Ireland. The initiative is managed by FHI 360.

PATH is an international nonprofit organization that saves lives and improves health by accelerating innovations that harness entrepreneurial insight, scientific and public health expertise, and passion for health equity. PATH's work on the first human milk bank in Vietnam is funded by Margaret A. Cargill Philanthropies.

