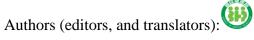
# **The Health Education Manual of Breast Milk Bank**





Bureau of Health Promotion, Department of Health,



Taipei City Hospital,



Taichung Hospital Department of Health

### Each Drop of Breast Milk is the Love of Mother- Introduction of Taiwan Breast Milk Bank and Satellite Station

The saying of "Natural is the best! " is the most appropriate description for breastfeeding. Breast milk contains the most complete and rich nutrients and can make adjustments for baby's needs. It not only provides the required nutrition within six months after baby birth, but also continues to, in line with balanced supplementary food, supply considerable nutrients to baby at least for two years or more. Breast milk is the best source of food designed by the creator for baby.

Consequently, the World Health Organization and UNICEF issued a joint statement in 1980 emphasizing that biological mothers who are unable to breastfeed should select the appropriate source of breast milk to feed their babies instead of wet-nurse. The breast milk bank, just like a modern wet nurse, is supervised by professional personnel and provides complete and safe nutrition of breast milk to infants. The establishment of Breast Milk Bank is also one of the Maternal and Children Policies actively promoted by the World Health Organization, and is of central importance particularly in providing safe sterile donated breast milk for high-risk infants suffering from severe diseases who are not be able to be breastfed by their own mothers in person.

The Center of Taiwan Breast Milk Bank (or referred to as the Bank) is located at the Branch for Women and Children Taipei City Hospital, the first non-profit institution dealing with donated breast milk in Asia. Since its inception in 2004, the Breast Milk Banks has an ongoing compliance with the standard operating procedures developed by the Human Milk Banking Association of North America (HMBANA) and UK Association of Milk Banking (UKAMB), and acquired the certification of UKAMB in 2009 to become the first international certified breast milk bank institute in Asia. In order to serve breast milk donators in central and southern Taiwan, Bureau of Health Promotion, Department of Health established a breast milk bank satellite station at Taichung Hospital, National Department of Health in 2009, hoping that the love of every milk-donated mother can be conveyed to babies.

Through the cross cooperation among hospital medical teams (such as divisions of pediatrics, infectious diseases, nutrition and clinical laboratory etc.), the domestic milk bank and satellite stations have complied with standard operation proceduresfrom the collection of milk donator's background information, the donators blood examination, the health education, consultation, screening and assessment for breast milk donators, the sterilization, nutritional analysis, storage and distribution arrangement of donated breast milk, the screening and assessment of breast milk receivers etc., in order to construct sound breast milk bank so as to provide safe and nutrient breast milk for premature infants and severe disease children.

## I. How to become a breast milk donor?

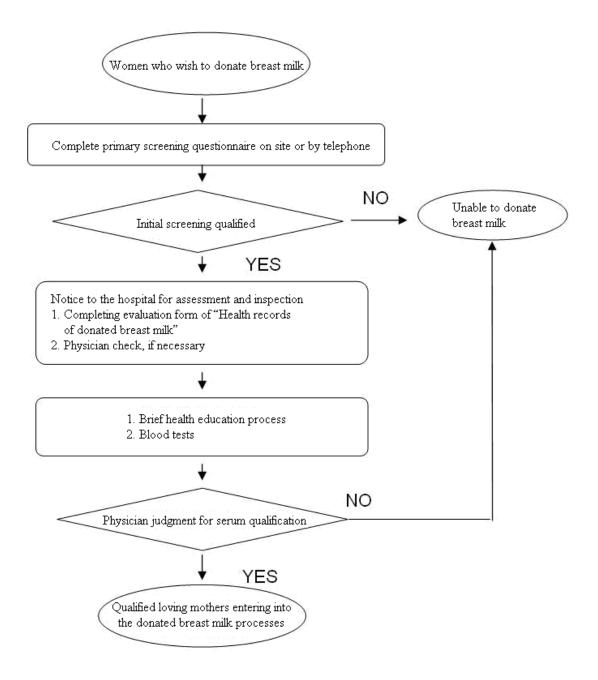
Mothers who wish to participate with breast milk donation should first make sure that their own breast milk are enough to meet their baby's needs prior to donate their excess breast milk. You can refer to following basic health screening questionnaire. If you fail to meet any of the following questions, please contact the Breast Milk Bank of Branch for Women and Children Taipei City Hospital or Milk Bank Station at Taichung Hospital to ask related information for breast milk donation. The Breast Milk Bank thank you for your love.

#### The following conditions are not suitable to donate breast milk:

- 1. Having been advised not to donate blood owing to reasons other than underweight, pregnant and breastfeeding.
- 2. Having following condition in the past year: receiving blood products (including immunoglobulin), organ or tissue transplants, ear piercing or body piercing, tattoos, tattoos of eyebrow or eyeliner, accidental acupunctured by subcutaneous injection.
- 3. Having received human pituitary growth hormone therapy, meningeal hard dural transplant or having close contact with patients of CJD (Creutzfeldt-Jakob Disease).
- 4. Born in Africa or used to live or travel to Africa after 1977.
- 5. Living in the Caribbean, Japan or Far East (except Taiwan) in last year.
- 6. Living in UK for more than three months between 1980 to1996.
- 7. Living in Europe for more than five years after 1980.
- 8 Infants having received intrauterine transfusion.
- 9. Having hepatitis or jaundice, or having cohabitation or sexual relations with people suffering from viral hepatitis or jaundice in the past year.
- 10 Having hepatitis A in last month.
- 11. Having sexual relationship with high-risk group of HIV / AIDS, including people of hemophiliacs, intravenous drug injection, or sex workers and gays
- 12. Having risky sexual behaviors (having sex with strangers, sex trade, one-night stand, more than one sexual partner, etc.).
- 13. Having self-injection of illicit drugs, or having sex with men of illicit drug injection.
- 14. Taking routine medicines while breastfeeding (other than vitamins, thyroid hormone, insulin, iron and progestin-containing contraceptives).
- 15. Using herbal medicines (other than medicine prescribed by qualified Chinese medicine practitioners).
- 16. Smoking cigarette and tobacco products or using nicotine patches or gum.
- 17. Suffering from chronic diseases such as cancer or multiple sclerosis.

## II. Flow and Check for Milk Donation

#### • Flowchart of breast milk donation



• Serum examination of donated breast milk: <u>free of charge</u>

- 1. All donors have to sign up breast milk donation consent and receive necessary serological tests. Check items are as follows:
  - ♦ Hepatitis A (anti-HAV IgM anti-HAV IgG)
    ♦ Hepatitis C (anti-HCV)
  - Hepatitis B (surface antigen of HbsAg, and surface antigen & antibody of anti-HBsAb)
     syphilis (syphilis)
  - ◆ Human immunodeficiency virus (HIV-1, HIV-2) ◆ blood count (CBC)

◆ Human T lymphoma virus type 1 (HTLV-1 and HTLV-2) ◆ Liver function (GOT / GPT)

2. Milk donators have to receive all serological tests before the first breast milk donation. If the test result is abnormal, the physicians of the Bank will give necessary medical and referral advices to breast milk donators. Milk donators should maintain healthy lifestyle while continuing the donation. If any abnormal health status occurs, the donator should take the initiative to contact and consult physicians of the Bank.

3. In order to protect milk donator's interests and privacy, the test results will be verbally noticed to individual donor by the Bank commissioner, respectively, and the test reports will be under the custody of the independent database of the Bank without being included into the hospital's medical records.

## III. The collection, storage and transport of breast milk

As milk of the Bank are mainly provided for premature infants and severe disease children who are relatively weak in physical condition., therefore, proper collection and preservation of breast milk coupling with low temperature sterilization process will be able to provide those babies with more safe and nutritious donated breast milk.

#### 1. Matters need attention for breast milk collection

\* Please select a well-ventilated and comfortable environment for breast milk collection.

\* Donator should maintain personal hygiene. There is no necessary to clean breast before milking for daily bathers, or to clean breast with clean water and replace clean clothes. It is recommended the donors to wear clothing with front open buckles or for the convenience of milking.

\* Clean and wash hands with soap and running water, and drying hands with paper towels prior to milking each time.

\* If milking via manual and electric breast pump, all parts (including milk bottle) of the device need to be disinfected by steam sterilization and dried (cover with a clean cloth) before use.

\* Select appropriate milking means and avoid nipples touching the clothing or the periphery of container:

- (1) Manual milking method: form the hand in letter "C" shape and position the thumb and areola above the nipple along with the index finger below both of them, and then use the rest fingers to support the breast. Use thumb and index finger to push straight from the breast into the chest wall and then relatively and gently squeeze the nipple and areola. Press the lactiferous sinuses and avoid squeezing to the nipple. Keep fingers from sliding along the skin or pressuring nipple, and repeat the action from all directions until milk comes out.
- (2) Manual / electric milking devices: place the trumpeted openings on the areola and close to the breast making the nipple in the center of the openings. Start the breast pump to let the milk flow out until all the lactiferous sinuses are squeezed empty.
- \* If milking were carried out after the breast being sucked by baby, it is recommended to discard the initial 10 cc of collected breast milk for avoiding bacterial contamination; otherwise, no necessary to discard them. Breast milk dropping out during the period or in the process of feeding your baby are not recommended to collect as donated breast milk.

#### 2. How to store breast milk properly

- \* Please use qualified breast milk bags or sterile glass bottles (without lining inside) to store breast milk.
- \* Breast milk collected from each breast can be stored separately.
- \* Cape the bottle immediately after completing the milk collection and stick label marked with collection time, place, means and the medication or special physical condition.
- \* The collected breast milk can be temporarily stored in refrigerator at the temperature of 4 °C. It should be placed at the lowest level instead of the side door of the freezer. Just squeezed breast milk can be added to frozen breast milk but try not to store more than 24 hours. Non-frozen refrigerated breast milk can be added to frozen breast milk but must return the bottle to the freezer immediately (do not place it on the side door of freezer).
- \* It is better to store the breast milk at a storage box with lid in the refrigerator (appropriately separating it with other frozen items)
- \* Arrange the placement of breast milk in the frozen layer according to the chronological order, and adopt the first in/first out principle while accessing.

#### 3. How to deliver the donated breast milk to the breast milk bank

\* While delivering breast milk to the Bank, it should be kept in a portable ice bucket or container with sufficient amount of frozen gel packs (do not use ice). The extra space of container can be stuffed with towels or rolls of paper to strengthen the frozen effect. Maintain the breast milk in frozen status during the entire transport process and deliver it to the Bank as soon as possible.

## 4. At what kinds of circumstances should the breast milk donation be temporarily terminated?

- 1. Within four weeks after any family member of the breast milk donator is suspected of German measles or chickenpox infection.
- 2. Within four weeks after the breast milk donator's inoculation of active vaccines of measles, mumps, Measles-Mups-Rubella (MMR), rubella, polio and yellow fever.
- 3. Donator who takes any drug, Chinese medicine or folk prescription should initiatively contact and inform the Bank, and be assessed by dedicated physicians of the Bank.
- 4. Within 12 hours after donator having alcoholic drinks.
- 5. Donator suffering from mastitis or her breast or nipple is of fungal infection.
- 6. Within 12 months after donator having body tattoo or piercing, eyebrow tattoo or accidental needle stick.
- 7 Donator's breast or upper body is suffering from skin diseases such as herpes simplex virus, herpes zoster or infective eczema.

#### 5. Which baby is eligible to receive milk from the breast milk bank?

Loving mothers' dedications contribute to the continuous milk supply of the Bank. All distributable donated breast milk has undergone strict inspection from the health screening to infectious disease, and every drop of breast milk has been through low-temperature sterilization in order to keep it in completely sterile state. Such rigorous processing aims to ensure the security of donators' breast milk.

Currently, the milk is mainly provided, according to the needs and conditions, to the following infant groups: infants of preterm, congenital anomalies, after major surgery, gastrointestinal diseases, feeding intolerance, or the unavailability of breast-feeding due mother illness or death etc. Any clinically eligible people can ask hospital physician who is in charge of the care to fill in a medical advice form (or download and print from the Bank website), and send it to the Bank attached with medical records summary. The responsible physician in the Bank will assess and verify the applicant's qualification. If the application is approved, dedicated personnel will contact the applicant about the collection time and quantity of breast milk.

The milk of the Bank are gathering from loves of many people's who wish to, without any expectation of paying back, offer assistance to help-needed babies. The recipients of the breast milk from the Bank are free of charge now.

## Principles of providing breast milk by breast milk bank are as follows (according to the order of priority)

**1.** Hospitalized premature infants

**2. Hospitalized full-term infants** (including infants of needing to strengthen the nutrition after major surgery, of congenital abnormalities, of mal-absorption or feeding intolerance, and of immunologic deficiencies)

3. Discharged preterm infants (available period for 40 weeks after pre-production)

If the inventory quantity in the Bank are sufficient, the donated breast milk can also be provided for the following indications:

**4. Other infants and children** (including temporarily breastfeeding stop due to mother illness, mother's own breast milk will affect the health of the baby due to disease or treatment, the death of baby's mother, or special indications reviewed and evaluated by dedicated physician of the Bank)

Branch for Women and Children, Taipei City Hospital (The Center of Breast Milk Bank) Address: Breast Milk Bank, 8F, No. 12, Fu-zhou Street, Zhong-zheng District, Taipei City Breast Milk Bank hotline: 02 -23581349 Fax: 23581349 Breast Milk Bank telephone extension: 02 -23916471-2051 Breast Milk Bank URL: www.tpech.gov.tw Blog: http://www.wretch.cc/blog/ped88888 Taichung Hospital, Department of Health, Executive Yuan (Breast Milk Bank Satellite Station) Address: No. 199, San-min Road, Taichung City, Taiwan Breast milk donation hotline: 04 -22294411-2579 Breast milk receipt hotline: 04 -22294411-2534 Fax: 04 -22294411-2552 Breast Milk Bank http://www.taic.doh.gov.tw/