



## Breast Milk Collection and Storage nursing guideline

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### I. Benefits of breast feeding:

Composition of breast milk is most suitable for babies' digestion and absorption. Breast milk is rich in antibodies and lymphocytes, it can enhance your baby's immunity and reduce the incidence of bacterial infections, gastrointestinal diseases and allergic disorders. Breastfeeding can promote parent-to-child relationship and help children to develop a healthy personality in the future. Foreign scientific studies have discovered that a breast-fed child has an IQ score of 9 points higher than a non breast-fed child does. Ultimately, would you want to deprive your child of breast milk knowing for a fact it's the best gift you can give to your baby?

### II. Methods for milk secretions:

- i. Have the first milk secretion or breast feeding within 6 hours after delivery then feed according to the baby's needs or milk every 2 to 3 hours regularly.
- ii. Mothers should have a balanced diet to consume large amounts of water and protein-rich food.
- iii. Mothers should have adequate sleep and rest in order to maintain a pleasant mood.

### III. Methods for breast milk collection

In certain circumstances where you cannot feed your baby directly, such as you have to go out working, the baby's hospitalized etc., you still can continue breast feeding. You can collect the breast milk in advance, the baby can be bottle-fed by caregivers and you can maintain milk excretion and amount without interruption. The Following are some guidelines for breast milk collection:

- i. Equipments preparation:
  1. milking pump (if needed)
  2. breast milk collection bags or sterile bottle (plastic or glass)
- ii. Equipments sterilization:

Using the boiling method to sterilize the milking pump, place glass bottle in a large saucepan and cover equipment in water, bring water to a boil and boil rapidly for 10 minutes before removing, place plastic bottle and other equipment in already boiling water for 3-5 minutes. If using a steam sterilization machine, please refer to the instruction manual and have the machine cleaned periodically.

iii. Preparation before breast milk collection:

Wash your hands thoroughly with detergent before each collection. Refrain from touching unsterilized objects such as your cellphone, remote control or computer with clean hands. If so, please wash your hands again.

iv. method of collecting breast milk:

1. Hand milking method: (see figure 1)

Wash your hands, choose a comfortable position, place a hand-held sterile container near the breast, with one hand and separating the thumb and four fingers of the other hand, place them above and below the areola about 2.5 to 4 centimeters away from the nipple in a C-type, use the thumb and index finger to gently apply pressure to the chest wall repeatedly, and then use the thumb and index finger to squeeze breast milk out.

Repeat the same method in all directions around the areola. Each breast should be pumped / milked 5-10minutes or until milk flow decrease Repeat on the other breast.



2. Electric or manual breast milk pump milking method:

Wash your hands, align the center of the sterilized breast pump to your nipple, create a tight and closed space surrounding the areola. Remember to begin at a low speed if using an electric pump; if using a manual breast milk pump, also start with gentle force to avoid discomfort but the principle is to have milk sucked out efficiently.

**IV. Methods for storage, thawing and warming of breast milk:**

i. Methods for breast milk storage:

1. Use sterile storage containers, label breast milk collection date, time and volume.
2. Do not store too much breast milk in each container. (depends on baby's feeding amount) Leave some room in the container so as to allow expansion during freezing of the breast milk and the prevent breakage of the container.
3. Use a separate container for each milk collection, do not reuse breast milk storage bags or containers.

4. When storing breast milk at home, store in an independent space. Do not place milk by the refrigerator door.

5. Storage time:

Simpler memorization method: "3-3-3", 3 hours at room temperature, 3 days in the refrigerator, 3 months in the freezer

(1) Mature milk can be stored for 6 to 8 hours.

(2) Mature milk can be stored in refrigerator for up to 5 days.

(3) Mature milk can be stored in freezer for 3 months.

6. To ensure breast milk's freshness while on the way to the hospital, please place the frozen breast milk inside an ice bucket (do not use thermal pot) and pack around the containers with ice packs or clean towels to maintain temperature. Bring it to the hospital during visiting hours.

ii. Methods for thawing breast milk:

1. Frozen breast milk can be taken out the freezer and stored in the refrigerator the night before to thaw (about 12 hours), and must be consumed within 24 hours after thawing.

2. If frozen breast milk is thawed in cold water, please use a clean container. Thawed milk should be stored in refrigerator and consumed within 4 hours after thawing. Do not re-freeze thawed breast milk.

iii. Methods for warming breast milk:

1. Warm the thawed breast milk in 50°C water before feeding. Do not use microwave oven to heat the thawed breast milk since microwave will destroy the active components and antibodies in breast milk.

2. Discard any remaining breast milk if not consumed. Do not re-use.

V. If you have any question or suggestion, please contact with us. We are happy to provide you services to you. Contact telephone number: MacKay Memorial Hospital: (02)25713760; Hsinchu MacKay Memorial Hospital: (03)5745098; Taitung MacKay Memorial Hospital: (089)310150 ext: 624. Time of consultant: 9:00 am~12:00 noon, 2:00 pm~5:00 pm Monday ~ Friday.

**May God Bless You**