

# SESSION 13

## MATERNAL HEALTH CONCERN

### **Breastfeeding Promotion and Support**

A Training Course for Health Professionals



*Adapted from the Baby Friendly Hospital Initiative:  
Revised, Updated and Expanded for Integrated Care (Section 3)  
WHO/UNICEF 2009*



# Session Objectives:

At the end of this session, participants will be able to:

1. Discuss the nutritional needs of breastfeeding women
2. Outline how breastfeeding assists in child spacing
3. Discuss breastfeeding management when the mother is ill
4. Review basic information on medication and breastfeeding

# **1. Nutritional Needs of Breastfeeding Women**

***What can you say to a mother who asks about what she should eat or avoid eating when she is breastfeeding?***

# Nutritional needs

- Need to eat enough foods and drink to feel well to care for the family
  - If she eats in sufficient amounts, she will get the proteins, vitamins and minerals that she needs.
  - Do not need to eat special foods or avoid certain foods when breastfeeding.

# Nutritional needs

- A woman's body stores fat during pregnancy to help make milk during breastfeeding.
  - She makes milk partly from these stores and partly from the food that she eats.



# Nutritional needs

- A mother needs to be in a state of severe malnutrition for her breastmilk production to decrease significantly
  - If there is a shortage of food, she first uses her own body stores to make milk.
  - Her milk may be reduced in quantity and slightly lower in fat and some vitamins compared to that of a well-nourished mother, but it is *still good quality*.

# Nutritional needs

- Poor food choices or missing a meal does not reduce milk production
  - a mother who is overworked, lacks time to eat, and does not have sufficient food or who lacks social support may complain of tiredness and a low milk supply
  - Care for the mother and time to feed the baby frequently, will help to ensure adequate milk production.



# Nutritional needs

- Breastfeeding is important for food
  - If resources are limited, it is better to give the mother food so that she can care for her baby than to give artificial feeds to the baby.
  - Discuss this with the family.

# Nutritional needs

- Breastfeeding mothers are often encouraged to drink large quantities of fluid.
  - Drinking more fluid than is needed for thirst will not increase milk supply.
  - A mother should drink according to her thirst or if she notices that her urine output is low or concentrated.

# Nutritional needs

- Calorie Needs: 500 kcal more
  - Milk production is 80% efficient:
  - To produce 100ml of milk (=65kcal), will require 85kcal expenditure
  - First 6 months: mothers produce 750ml of milk  
(range 550-1200ml : depend on frequency of sucking).
  - Milk production will require 700-800 kcal/day :
    - 500 kcal from diet
    - 100-150 kcal from maternal fat stores during pregnancy.
  - Energy requirement: 2300-2500 kcal/day for the first 6 months of lactation.
  - If overweight or obese : need not increase up to 500kcal/day.

# ***Energy and Nutrients Needs***

<b>Nutrient</b>	<b>Normal</b>	<b>Pregnant</b>	<b>Lactation</b>
<i>Energy (Kcal)</i>	2000	2000-2470	2500
<i>Protein (g)</i>	55	62.5	75
<i>Calcium(mg)</i>	800	1000	1000
<i>Vit. A (mcg)</i>	500	800	850
<i>Vit.C (mg)</i>	70	80	95
<i>Thiamin, B1 (mg)</i>	1.1	1.4	1.5
<i>Riboflavin,B2 (mg)</i>	1.1	1.4	1.6
<i>Niacin,B6 (mg)</i>	14	18	17
<i>Folate(mcg)</i>	400	600	500

Reference: Recommended Nutrient Intake for Malaysian, 2005

Session 13 : Maternal Health Concerns

Ministry of Health Malaysia

# *Number of Serving*

<b>Foods group</b>	<b>Normal</b>	<b>Pregnant</b>	<b>Lactation</b>
<i>Cereal</i>	11	11	12
<i>Oil/fats</i>	10 tea sp	10 tea sp	10 tea sp
<i>Fish/meat/nuts</i>	3	4	5
<i>Milk/ diary products</i>	1-2	2-3	2-3
<i>Vegetables</i>	2	3	3-4
<i>Fruits</i>	3	3	3-4

# FOOD PYRAMID



## **Level 4** (top of the food pyramid)

Fat, oils, sugar and salt

May provide up to 35% of total energy intake

---

## **Level 3**

Milk and dairy products

2 servings daily

Fish, poultry, meat and legumes

3 servings daily (+15-20g Protein/day)

---

## **Level 2**

Fruits and vegetables

At least 5-6 servings daily (fibre)

---

## **Level 1** (base of the food pyramid)

Rice, noodles, bread, other cereals and cereal products and tubers

12 servings daily (encourage whole grains)

## LEVEL 1 - Rice, noodles, bread, other cereals and cereal products and tubers



- Good sources of complex carbohydrates.
- Also provide vitamins, minerals, fiber and some proteins.
- Low fat.

# ***Requirements: 11-12 servings of cereals a day***

## **One serving :**

- = ½ cup cooked rice
- = 1 slice wholemeal bread
- = ½ cup mee hoon/mee
- = ½ small chapatti
- = 1 cup plain porridge
- = 1 medium potato
- = 3 pieces cream cracker





## LEVEL 2 - Fruits and Vegetables



- Good source of vitamins and minerals.
- Source of fiber.
- Eat at least one source of vitamin A and C.

# ***Requirements: 3-4 servings of vegetables a day***

## **One serving :**

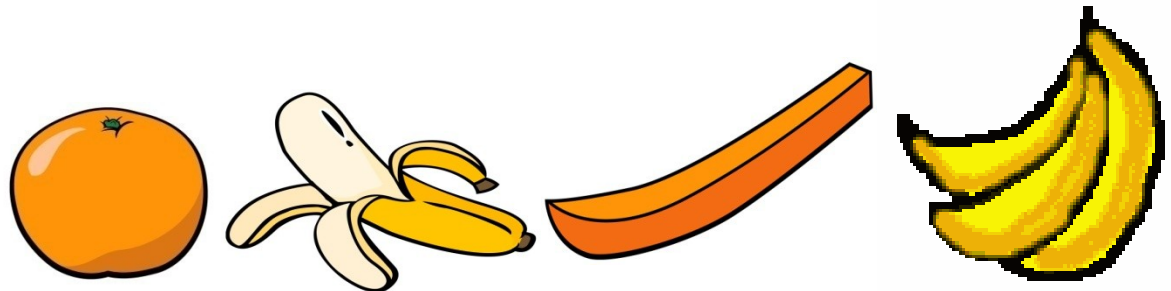
- = ½ cup cooked green leafy vegetables with edible stem
- = ½ cup cooked fruit or root vegetables
- = ½ cup sweet potatoes



# ***Requirements: 2-3 servings of fruits a day***

## **One serving :**

- = ½ medium guava
- = 1 slice papaya, pineapple, watermelon
- = 1 medium banana, orange, pear and apple
- = ¼ cup dried fruits (without sugar)
- = ½ cup juice



# ***Vitamins and Minerals***

- Most vitamins and minerals are present in remarkably constant levels, regardless of mother's diet.
- Quantity of milk declines with prolonged inadequate intake of **B vitamins**.
- Nutrients of concern: **zinc, vitamin D & vitamin A**.
- For some nutrients with deficit from diet, maternal stores are used: calcium & folate.

## LEVEL 3 - Fish, poultry, meat and legumes



- Good sources of protein.
- Rich in B vitamins, iron and zinc.
- Legumes are good alternatives to meat and low in fat.
- Legumes are rich sources of vitamin B, fibre and magnesium.

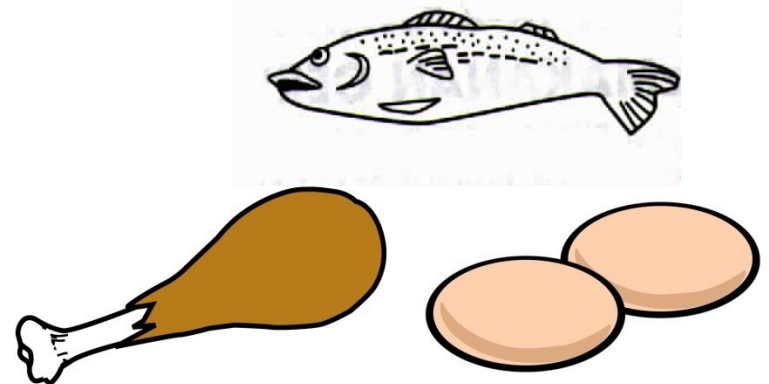
# ***Proteins***

- Protein requirement is estimated from breast milk composition.
- 750 ml milk/day : 70% efficiency from protein.
- Hence, increased requirement of 15-20 g/day.
  - Translates into additional > 1 – 1 ½ servings more of meat, fish, poultry, legumes.

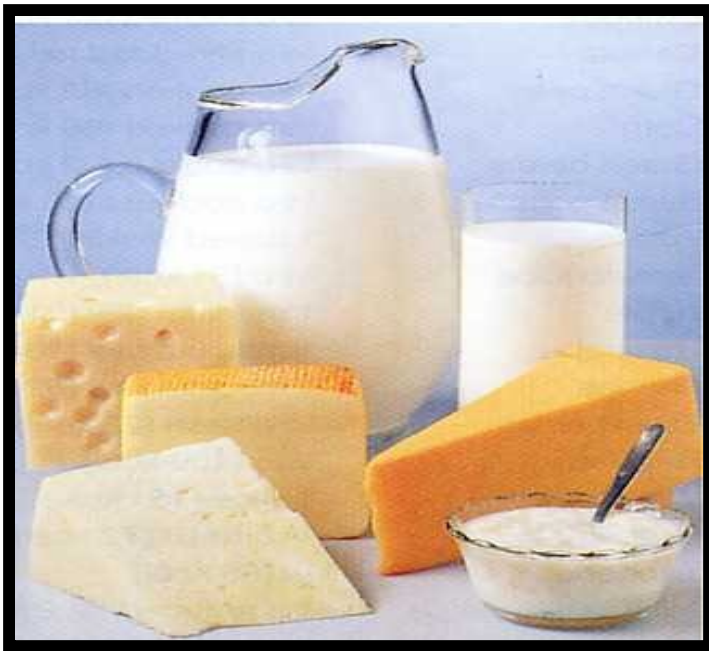
# ***Requirements: 5 servings of fish, meat, poultry***

## **One serving :**

- = 1 medium fish (100g), raw
- = 1 pieces meat (45g), raw
- = 1 pieces chicken (54g), raw
- = 5 tablespoons anchovies without heads
- = 2 eggs
- = 2 pieces tempeh
- = 1 cup dried legumes/b



## LEVEL 3 - Milk and Dairy Products



- Source of calcium.
- Important source of protein.
- Source of vitamin



# ***Requirements: 3 servings of milk and dairy products***

**One serving :**

= 1 cup milk (200 ml)

= 1 cup yogurt

= 1 slice cheese



## LEVEL 4 - Fats, oils, sugar and salt



- May provide up to 35% of total energy intake.
- No set limit for fat intake.
- Maternal diet directly influences the breast milk composition.
- Normal fat intake: 20-30% of total calories.
- Focus on essential fatty acids.

# ***Omega-3 & Omega-6 fatty acids***

- Long chain Polyunsaturated Fatty Acids
  - essential for brain, growth and development of infant
- Sources:
  - fish and seafood as well as some eggs, nuts (walnuts), seeds and oils (canola, soy), some green leafy vegetables



## **2. How Breastfeeding Assists in Child Spacing**

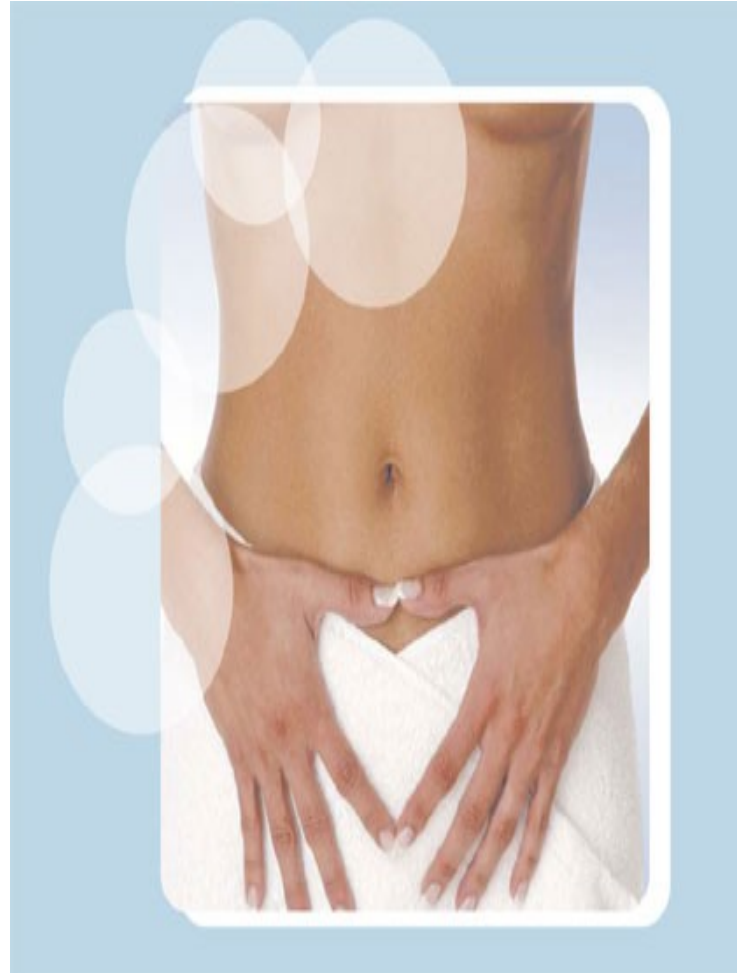
***What can you tell a mother about  
how breastfeeding helps to  
space children?***

# Breastfeeding and spacing of pregnancy

- Breastfeeding can delay the return of ovulation and menstruation
  - Can help to space pregnancies
- The Lactation Amenorrhea method (LAM) helps women who wish to use breastfeeding for child spacing

# ***The LAM method is 98% effective in preventing conception **IF** 3 conditions are met:***

1. The mother is not menstruating, and
2. The mother is exclusively breastfeeding, (*day and night*) with no very long intervals between feeds, and
3. Baby is less than 6 months old.



# LAM

- If any of these three conditions are **not met**, it is advisable for the mother to use another method of family planning to achieve pregnancy delay.
- Most family planning methods are compatible with breastfeeding with exception of estrogen containing contraceptive pills.





# **3. Breastfeeding Management When Mother is ill**

***What can you tell a mother about  
breastfeeding if she is ill?***

# Breastfeeding when mother is ill

- Women can continue to breastfeed in nearly all cases when they are ill
- There are many benefits to continuing breastfeeding during illness



## ***Benefits of continuing breastfeeding when mother is ill***

- Baby may show signs of distress eg cry a lot if breastfeeding suddenly stops
- May be difficult to return to breastfeeding after the mother has recovered as her milk production may have decreased
- Stopping breastfeeding leaves baby exposed to all hazards of artificial feeding

# ***Benefits of continuing breastfeeding when mother is ill***

- Breastfeeding is less work than preparing formula, sitting up to feed and sterilising bottles
  - Baby can lie beside mother and feed as needed without her moving
- Mother and baby can stay together
  - knows baby is safe, feels happy
- Baby continues to receive benefits of breastfeeding

## ***Mothers with chronic illness***

- may need extra help to establish breastfeeding
  - E.g mother with diabetes may experience complications during delivery
  - Can interfere with establishing breastfeeding
  - With appropriate help, can breastfeed normally



***What kind of help with  
breastfeeding may be needed if  
a mother is ill?***

# ***Assisting with breastfeeding when mother is ill***

- Explain the value of continuing to breastfeed
- Minimise separation, keep mother and baby together
- Give plenty of fluids, esp if she has fever
- Assist mother to find comfortable position for feeding
- If too difficult/unwell, help to express and cup feed baby
- Choose treatment and medications that are safe for breastfeeding
- Assist mother to re-establish breastfeeding after recovery



***Are there any situations related to the mother's health that may require the use of foods other than breastmilk?***

# *Use of Artificial Feeds*

- Very few situations related to maternal health that require the use of artificial feeds
- Distinguish between:
  - illness that is contraindication for breastfeeding
  - situation surrounding the illness that makes breastfeeding



# ***Hospitalisation***

- Hospitalisation is **NOT** a contraindication to breastfeed
- Baby should be kept with mother
- If mother not able to take care of infant
  - Ask family member to stay and help

# ***Maternal Addiction***

- Breastfeeding remains the feeding method of choice for majority of infants
  - even in tobacco, alcohol and drug use
- For hard-drug users
  - Decisions on case by case basis
- Breastfeeding not recommended for IV drug users

# *Contagious illness*

- With common contagious illness (chest infection, sore throat, GI)
  - Baby is at risk of being exposed to the infection through contact
  - When mother continue to breastfeed, baby receives protection from the infection
- For most maternal infections: (TB, Hep B)
  - Breastfeeding not contraindicated
  - *(see complete list in: Maternal illness and Breastfeeding)*

## **4. Medications and Breastfeeding**

# Maternal Medications and Breastfeeding

- Risks are greater during the first 2 month and with high dosages (as therapy or with abuse)
- Monitor infants for adverse effects.
- Use in older infants and the use of low doses usually require no special precautions.

# Maternal Medications and Breastfeeding

1. If a mother requires medication, it is often possible for the doctor to prescribe a drug that may be safely taken during breastfeeding.
  - Most drugs pass into breastmilk only in small amounts and few affect the baby.
  - In most cases, stopping breastfeeding may be more dangerous to the baby than the drug.



# Maternal Medications and Breastfeeding

2. A medication the mother takes is more likely to affect a premature baby or a baby less than two months old than an older baby.
  - If there is a concern, it is usually possible to find a drug or treatment that is more compatible with breastfeeding.

# Maternal Medications and Breastfeeding

3. If a breastfeeding mother is taking a drug that you are not sure about:

- Encourage mother to continue breastfeeding while you find out more.
- Watch the baby for side effects such as abnormal sleepiness, unwillingness to feed, and jaundice, especially if the mother needs to take the drug for a long time.
- Check the WHO list, (explain where to get this list or other locally available list that is breastfeeding supportive).
- Ask a more specialized health worker, for example a doctor or pharmacist for more information, and to find an alternative drug that is safer if needed.
- If the baby has side effects and the mother's medication cannot be changed, consider a replacement feeding method, temporarily if possible.

# Maternal Medications and Breastfeeding

4. Traditional treatments, herbal medicines and other treatments may have effects on the baby.
  - Try to find out more about them if they are commonly used in your area.
  - Meantime encourage the mother to continue breastfeeding and to observe the baby for side effects.

# ***Other substances that can adversely affect breastfed infants***

- **Alcohol**

- \_ taken before breastfeeding can cause reduced milk intake

- **Smoking**

- \_ Maternal use of nicotine often decreases the breastfeeding, and can adversely affect the infant. Breastfeeding is preferable to formula feeding in smoking mothers.
  - \_ Infants should not be exposed to tobacco smoke.



# ***Other substances that can adversely affect breastfed infants***

- Abuse of amphetamines, cocaine and related stimulants may produce harmful effects on breastfeeding babies, especially if the infant is additionally exposed to the drugs by inhalation of smoked drugs

# Summary

## **1. Nutritional needs of breastfeeding women**

- All mothers need to eat enough foods so that they will feel well and be able to care for their families.
- Mothers do not need to eat special foods or avoid certain foods when breastfeeding.
- If the food supply is limited, it is better for the health and nutrition of both mother and baby and less expensive to give the mother food so that she can care for her baby than to give artificial feeds to the baby.

## **2. How breastfeeding helps to space births**

The LAM method is 98% effective if three conditions are met:

- The mother is not menstruating,
- The mother is exclusively breastfeeding, with no very long intervals between feeds,
- Baby is less than 6 months old.

If any of these three conditions are not met it is advisable for the mother to use another method of family planning.

### **3. Breastfeeding management when the mother is ill**

You can assist BF during maternal illness by:

- Explaining the value of continuing to breastfeed during illness,
- Minimising separation, keeping mother and baby together,
- Giving plenty of fluids, especially if there is a fever,



## **Breastfeeding management when the mother is ill**

You can assist BF during maternal illness by:

- Assisting the mother to find a comfortable position for feeding,
- Assisting mother to express, and feeding the baby breastmilk by cup if the mother is too unwell to breastfeed,
- Choosing treatments and medications that are safe for breastfeeding,
- Assisting mother and baby to re-establish breastfeeding when the mother recovers, if she has not breastfed during her illness.

## **4. Medications and breastfeeding**

- Often, if a medication is needed, one can be used that is safe for her baby. Most drugs pass into breastmilk only in small amounts and few affect the baby. In most cases, stopping breastfeeding may be more dangerous to the baby than the drug.
- Watch the baby for side effects and find out more about the drug if you are worried. Babies under 2 months of age are more likely to show side effects.
- Know where to get more information or advice on medications.

# THANK YOU