

# EATING HEALTHFUL FOR SUCCESSFUL BREASTFEEDING

Infancy  
series



## ◎ You are what you eat!! Eat healthfully for successful breastfeeding

Do not diet! Do not deprive your body of the essential nutrients! Your body needs to recover and heal from the stress of childbirth, as you breastfeed

## ◎ Eat a nutritious diet while breastfeeding to help you:

- Obtain all essential nutrients to stay healthy
- Produce generous supplies of high quality milk for your baby
- Regain a healthy weight



## ◎ The simplest way to eat healthy is to follow

### The Healthy Diet Pyramid

Keep 3 principles in mind:

#### Moderation

Consume the right amount of food- not too much or too little



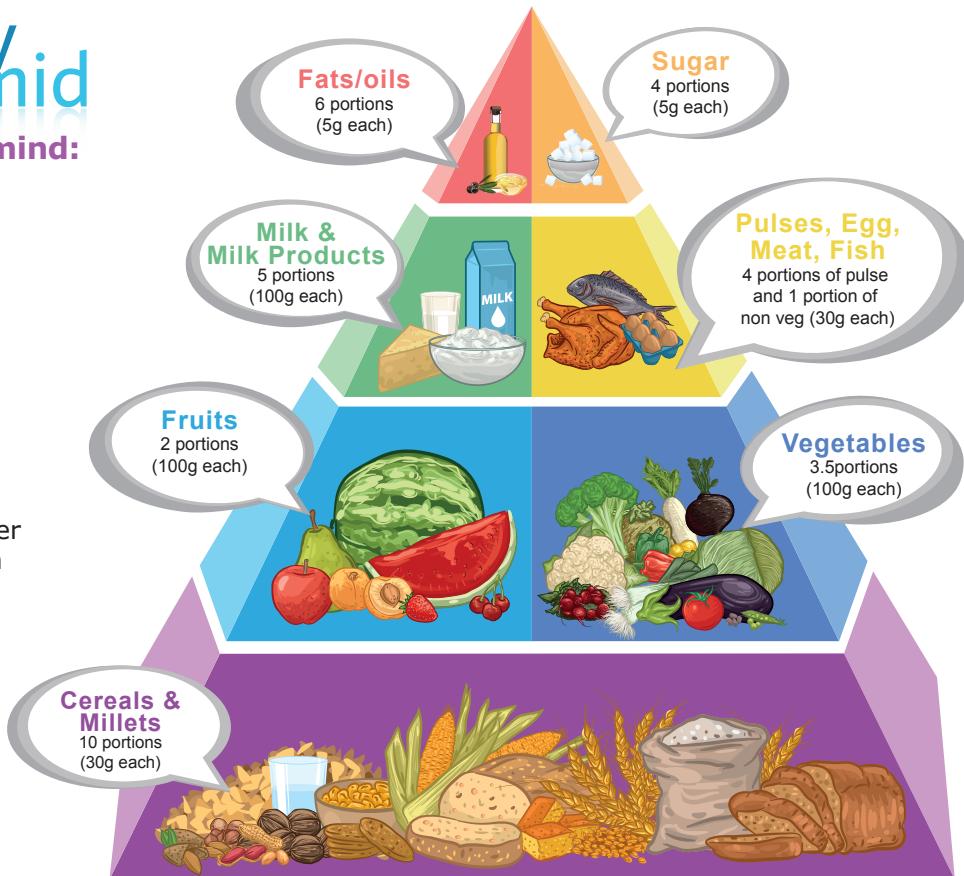
#### Balance

Consume different number of servings of food from all food groups daily



#### Variety

Consume different foods from and within all food groups



## ◎Important nutrients for you and your baby!

Here are some important nutrients and its source in your daily diet:



### OMEGA 3 FATTY ACIDS:

#### Functions:

- Supports brain and nervous system growth and development in baby
- Lowes risk of postnatal depressions
- Reduces inflammation and may reduce the risk of heart disease and breast cancer

#### DHA requirements (200 mg/day)

##### Sources of Docosahexanoic acid (DHA)



Source: Exler J. Wehrauch JL Provisional table on the content of omega- 3 fatty acids and other fat components in selected foods. U.S.D.A, Human Nutrition Information Service, HNS/PT-103, 1988.

#### ALA requirements (1380 - 1610 mg/day)

##### Sources of Alpha Linolenic Acid (ALA)



#### Tip:

The DHA content of breast milk is dependent on mother's diet. An Indian diet is low in DHA. Indian mothers, especially who are vegetarian needs to increase the intake of DHA through supplementation. Talk to your doctor today.

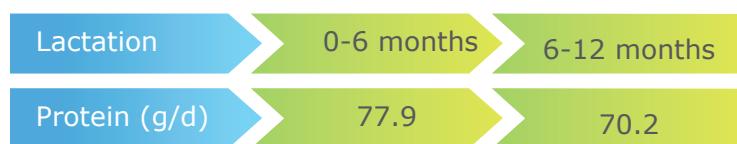


#### Interesting fact

In our body ALA is converted to EPA and DHA. About 35% of ALA (from plant based food) is converted to EPA and DHA.

## ◎ Proteins

Recommended dietary allowance for Indian lactating women



### Functions:

- Promotes an adequate supply of breast milk
- Supports growth and maintenance
- For proper brain function
- For synthesizing hormones, enzymes and antibodies

### Sources:

Protein is present in both animal and plant sources, namely:

#### Animal Protein Sources

Are called Complete or First Class Proteins because they contain all the essential amino acids (which our bodies can't make, so they have to be obtained from our food), in the right properties to build body protein

- Red meats e.g. beef, pork, lamb, venison
- White meats e.g. chicken, fish, shellfish
- Milk, cheese, yoghurt
- Eggs



#### Plant Protein Sources

Are considered Incomplete or Second Class Proteins because one or more of the essential amino acids are missing or they are found in small amounts. Soybeans are the only plant food that contain complete protein

- Beans, peas, dhal, soybean
- Nuts and seeds
- Grains and grain products e.g. bread, rice, chapatti



### Protein complementation:

To achieve a complete source of protein from plant protein sources:

- Combine 2 vegetable proteins (e.g. grains + legumes\* or nuts/seeds+ legumes\*) at the same meal or within the same day.

Examples:



Eg : Khichadi

Eg : Idli/Dosa

## ◎ Calcium

### Requirement 1200 mg/day

#### Functions:

- Builds and maintains strong bones and teeth for the baby
- Preserves bone mass when breastfeeding.
- May play a role in maintaining healthy body weight
- Helps the heart, nerves and muscles to develop and function healthily

#### Best Calcium sources(mg): Milk & milk products<sup>+</sup>

You can meet your daily calcium requirement easily, by including 1 or more servings of milk and milk products a day, together with other calcium - rich food sources



314

1 cup (230) Low Fat Fruit flavoured Yoghurt



300

1 glass (250 ml) Low Fat Milk



204

30g Cheese

<sup>+</sup>Milk and milk products contain a lot of calcium in a form that the body can easily absorb. Moreover, they have other important nutrients that are good for bones & teeth, eg. Phosphorus, Vitamin D, Magnesium and Protein.

#### Other Calcium sources(mg):



135

5 pieces (94g) dried Figs



130

1/2 cup (90g) cooked Soybeans



120

1/2 cup (90g) cooked Spinach



91

1 piece canned Sardine (38g) with bones



75

1/2 cup (85g) Methi



162

Ragi/ Nachni 50g

## ◎ Iron

### Requirement 25 mg/day

#### Functions:

- For production of healthy red blood cells
- Helps maintain healthy immune system
- Required for normal brain function

#### Things you should know about Iron:

- Iron bio-availability is poor from plant foods but is good from animal foods.
- Fruits rich in vitamin C like gooseberries (amla), guava and citrus fruits improve iron absorption from plant foods.
- Beverages like tea binds dietary iron and makes it unavailable. Hence, they should be avoided before, during or soon after a meal.



## Iron in food:

Iron is present in both animal and plant food sources:

### Heme Iron

- Usually present in animal food sources
- A form that is more easily absorbed by the body than Non-heme Iron, which is usually found in plant food sources



### Non - Heme Iron

- Present primarily in plant food sources
- Absorption is significantly influenced by various food components:
  - Enhanced by meat proteins (e.g. beef and pork) and vitamin C rich foods (guava, orange, papaya, mango, tomato, broccoli and capsicum)
  - Decreased by tannins (found in tea), calcium, polyphenols, and phytates (found in legumes and whole - grains)



### Sources:

#### Heme Iron Sources(mg)



#### Non- Heme Iron Sources(mg)



## ◎ Folic acid

Requirement 300 mcg/day

### Functions:

- Supports cell division and DNA synthesis
- Protect you against heart disease, osteoporosis and cancer
- Helps in synthesis of hemoglobin in red blood cells.



### Sources



## ◎ Zinc Requirement 12 mg/day

### Functions:

- Supports development of immune system
- Promotes tissue growth and repair
- Promotes brain growth and development
- Is necessary for body processes and function

### Zinc in Animal Source (mg)



### Zinc in Plant Source (mg)



## ◎ Fluids

Fluid intake influences the volume of breast milk. Milk should be an important component of your diet. Consume 500 – 750 ml of milk per day and drink at least 8-10 glasses of water along with juices, soups, buttermilk etc. This will help in milk production.



### Dishes that contribute some fluids to your diet:



### Beverages to minimize:



These beverages contain caffeine & should be minimized, as they are diuretics and make you urinate more, so you actually lose water.

## **IMPORTANT INFORMATION**

Breast milk is the best food for babies as it is the sole source of nutrition for the first 6 months of life and is recommended to be continued until 2 years, with introduction to appropriate complementary foods after 6 months of age.

### **A. Following are the details of advantages, as also nutritional superiority of breast-feeding :**

- i)** Immediately after delivery, breast milk is yellowish and sticky. This milk is called as Colostrum, which is secreted during the first week of delivery. Colostrum is more nutritious than that of mature milk because it contains more protein, more anti-infective properties which are of great importance for the infant's defence against dangerous neo-natal infections. It also contains higher level of Vitamin 'A';
- ii)** Breast Milk -
  - a) Is a complete and balanced food that provides all the nutrients needed by the infant (for the first six months of life);
  - b) Has anti-infective properties that protect the infants from infection the early months;
  - c) Is always available;
  - d) Needs no utensils or water (which might carry germs) or fuel its preparations;
- iii)** Breast-feeding is much cheaper than feeding infant milk substitutes as the cost of the extra food needed by the mother is negligible compared to the cost of feeding infant milk substitutes;
- iv)** Mothers who breast-feed usually have longer periods of infertility after child birth than non-lactators;

### **B. Details of management of breast-feeding, are as under :**

- i)** Breast-feeding-
  - a) Immediately after delivery enables the contraction of the womb and helps the mother to regain her figure quickly;
  - b) Is successful when the infant suckles frequently and the mother wanting to breast-feed is confident in her ability to do so;
- ii)** In order to promote and support breast-feeding the mother's natural desire to breast-feed should always be encouraged by giving, where needed, practical advise and making sure that she has the support of her relatives;
- iii)** Adequate care for the breast and nipples should be taken during pregnancy;
- iv)** It is also necessary to put the infant to the breast as soon as possible after delivery;
- v)** Let the mother and the infant stay together after the delivery, the mother and her infant should be allowed to stay together (in the hospital, this is called "rooming-in");
- vi)** Give the infant Colostrum as it is rich in many nutrients and its anti-infective factors protect the infants from infections during the few days of its birth;
- vii)** The practise of discarding Colostrum and giving sugar water, honey water, butter or other concoctions instead of Colostrum should be very strongly discouraged;
- viii)** Let the infants suckle on demand;
- ix)** Every effort should be made to breast-feed the infants whenever they cry;
- x)** Mother should keep her body and clothes and that of the infant always neat and clean,