



Complementary feeding

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Pregnancy



270 days

+

First year



365 days

+

Second year



365 days

=

The first



1000 days

Importance



Nutrition



Pregnancy + Year 1 + Year 2 = 1000 days
(270 days + 365 days + 365 days)



Crucial window of opportunity

- Survival
- Growth
- Development

Microbiome

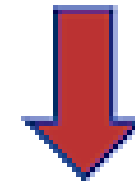
Epigenome



F I R S T
1 0 0 0
D A Y S



Pregnancy + Year 1 + Year 2 = 1000 days
(270 days + 365 days + 365 days)



Crucial window of opportunity

- Survival
- Growth
- Development

THE POWER OF THE FIRST 1,000 DAYS

The right nutrition in the 1,000 days between a woman's pregnancy and her child's second birthday builds the foundation for a child's ability to grow, learn and thrive.

Pregnancy:

Pre-pregnancy to birth

Babies developing in the womb draw all of their nutrients from their mother. If mom lacks key nutrients, so will her baby, putting the child's future health and development at risk.



Infancy:

Birth to 6 months

Breast milk is superfood for babies. Not only is it the best nutrition an infant can get, but it also serves as the first immunization against illness and disease.



Toddlerhood:

6 months to 2 years

Nutrients from a variety of healthy foods are an essential complement to breast milk to ensure healthy growth and brain development.



The impact of good nutrition early in life can reach far into the future. Children who get the right nutrition in their first 1,000 days:

ARE 10x MORE

likely to overcome the most life-threatening childhood diseases¹



COMPLETE

4.6 more grades of school²



Go on to earn

21% more in wages as adults³



Are more likely as adults to have healthier families⁴



SOURCES

1. Save the Children, Nutrition in the First 1,000 Days: State of the World's Mothers 2012.
2. Hodinott, J. et al "Adult consequences of growth failure in early childhood." American Society for Nutrition, 2013.
3. Ibid.
4. Ibid.



www.thousanddays.org

True Picture

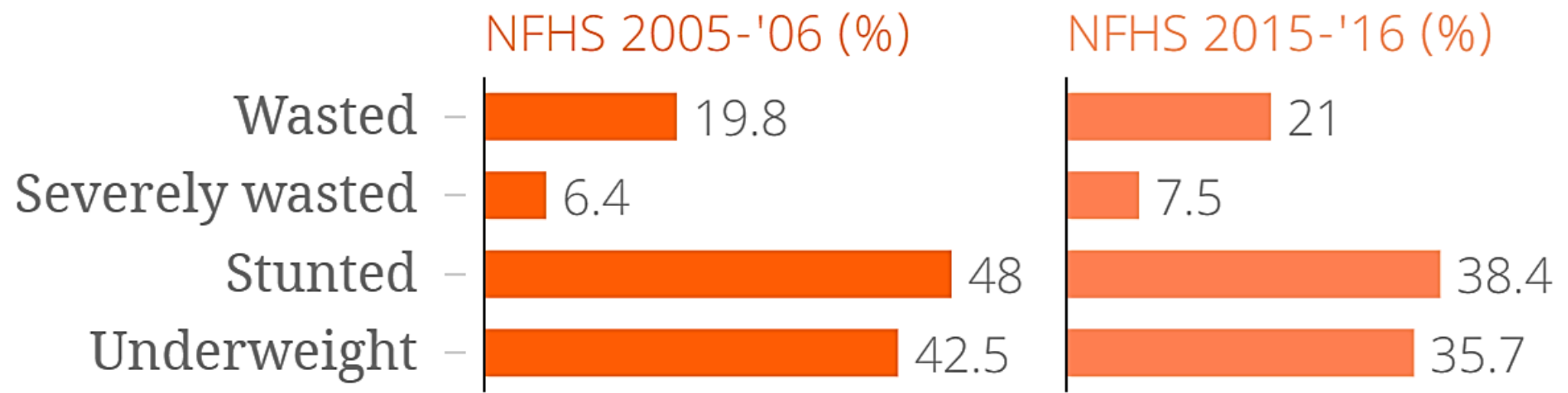


Key Indicators	NFHS-3 (2005-06)	NFHS-4 (2015-16)
Children under age 3 years breastfed within one hour of birth	23.4%	41.6 %
Children under age 6 months exclusively breastfed	46.4%	54.9 %
Children age 6-8 months receiving solid or semi-solid food and breast milk	52.6%	42.7 %
Breastfeeding children age 6-23 months receiving an adequate diet	NA	8.7%

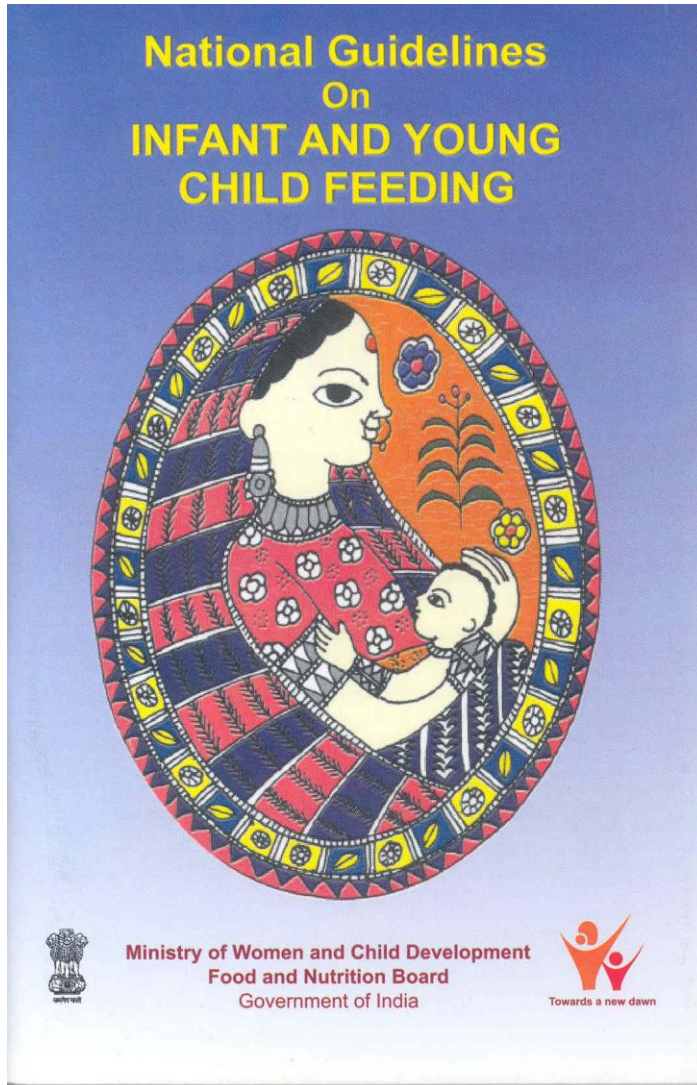




Malnutrition of children (ages 0-5) in India



Plan



- **Infant and Young Child Feeding (IYCF)**
- Set of recommendations for appropriate feeding of new-born and children under two years of age

Optimal IYCF Practices



Initial Breastfeeding



Early initiation of breastfeeding; immediately after birth, preferably within one hour

Exclusive Breastfeeding



Exclusive breastfeeding for the first six months of life

Complementary Feeding



Timely introduction of complementary food (maintaining adequate diet and dietary diversity) beyond six months along with continued breastfeeding

Infant and Young Child

Feeding



Breastfeeding within one hr of birth reduces the risk of neonatal mortality by 33%



Exclusive breastfeeding can reduce 13% under five death



Breastfeeding has tremendous impact on the Cognitive Development (Gain of up to 8 IQ Points)



Complementary Feeding promotes Optimal growth, Prevents Stunting, Micronutrient deficiencies, Anaemia and Overweight

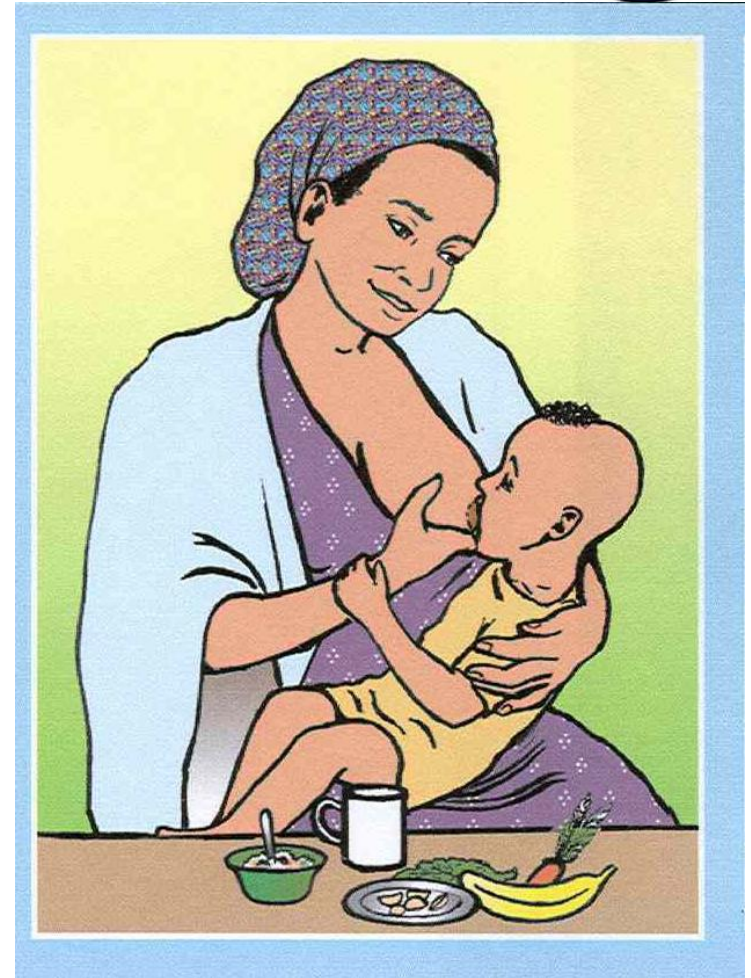
Economic gains of \$302 billion/year due to increased productivity associated with higher intelligence



Complementary feeding



- Giving infant food and other liquids along with breast milk or non-human milk
- These food should complement rather than replace breast milk
- Different from **Weaning**



Complementary feeding



- Bridge between liquid to solid transition and empower the baby to 'family pot feeding'



- Complementary foods - should be **appropriate**
- **But how??**

Appropriate Complementary Feeding



- **Timely:** Introduced when need for energy and nutrients exceeds that provided by BF
- **Adequate:** Should provide sufficient energy, protein and micronutrients
- **Properly Fed:** Active feeding method and proper frequency according for age
- **Safe:** Should be hygienically prepared, stored and fed

Timing of Complementary Feeding



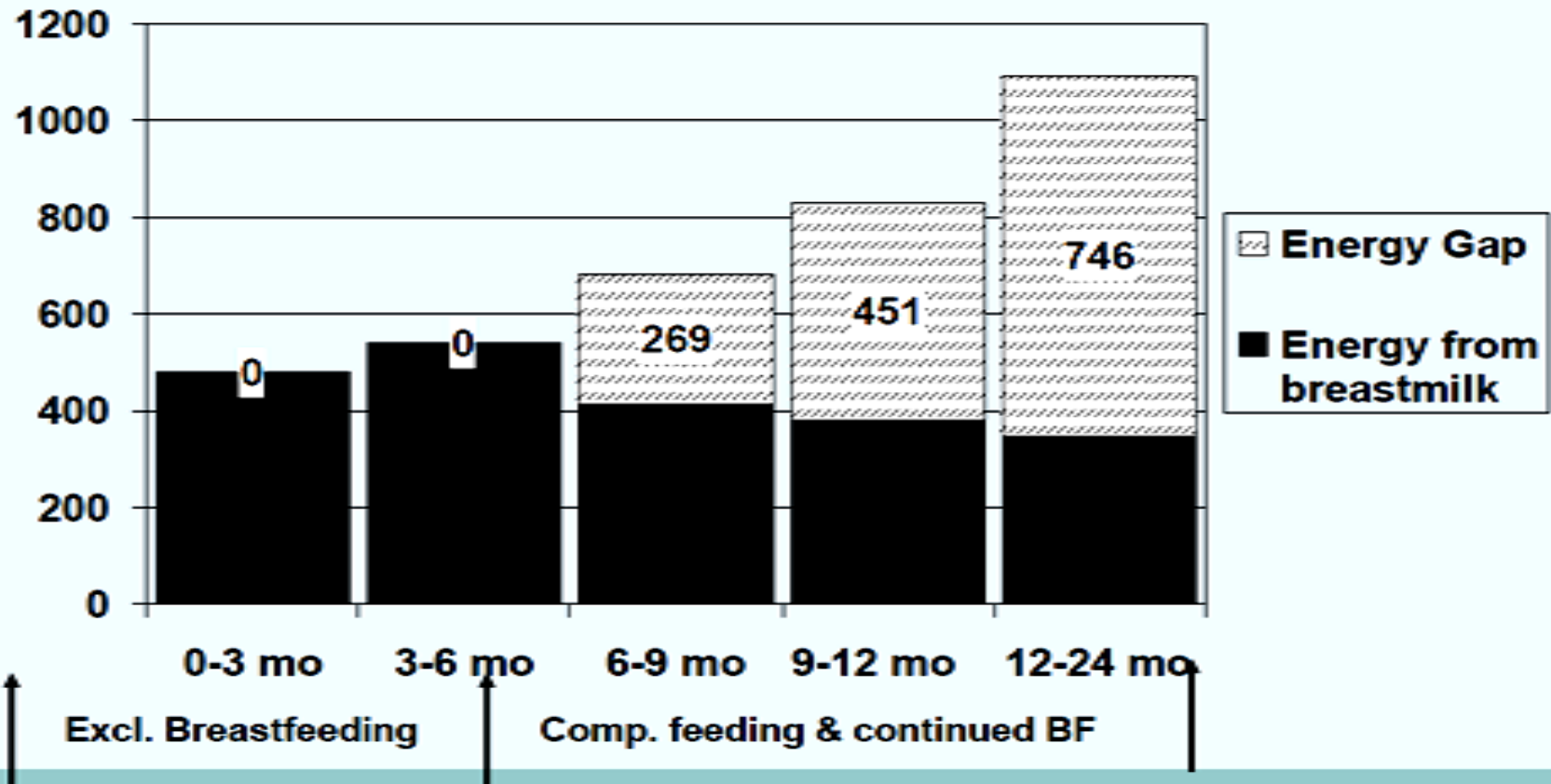
- **Soon after completing 6 months of age**
- Breast milk sufficient to promote growth and development till 6 months
- Energy - nutrient gap widens thereafter
- Infant's development and behavior makes him ready for other foods
 - Holds objects and takes everything to mouth
 - Chewing movements start
 - Tendency to push solids out decreases
 - Eruption of teeth and beginning of biting movements



Age of Introduction



Energy Needs





- **Disadvantages of adding foods too soon**

- Decrease the intake of breast milk resulting in a low nutrient diet
- Increase risk of illness esp. diarrhea

- **Disadvantages of adding foods too late**

- Growth and development slows down or stops
- Risk of deficiencies and malnutrition

Continue Breastfeeding - Why?



- Vital source of energy (30-40%) and nutrients into 2nd year of life
- Key source of
 - Good quality proteins & essential fatty acids
 - Micronutrients:
 - 45% of Vitamin A
 - 40% of calcium & riboflavin
 - Fluids and nutrients during infection
- Associated with greater linear growth
- Linked to lower risk of chronic diseases & obesity



Adequacy (Quality)



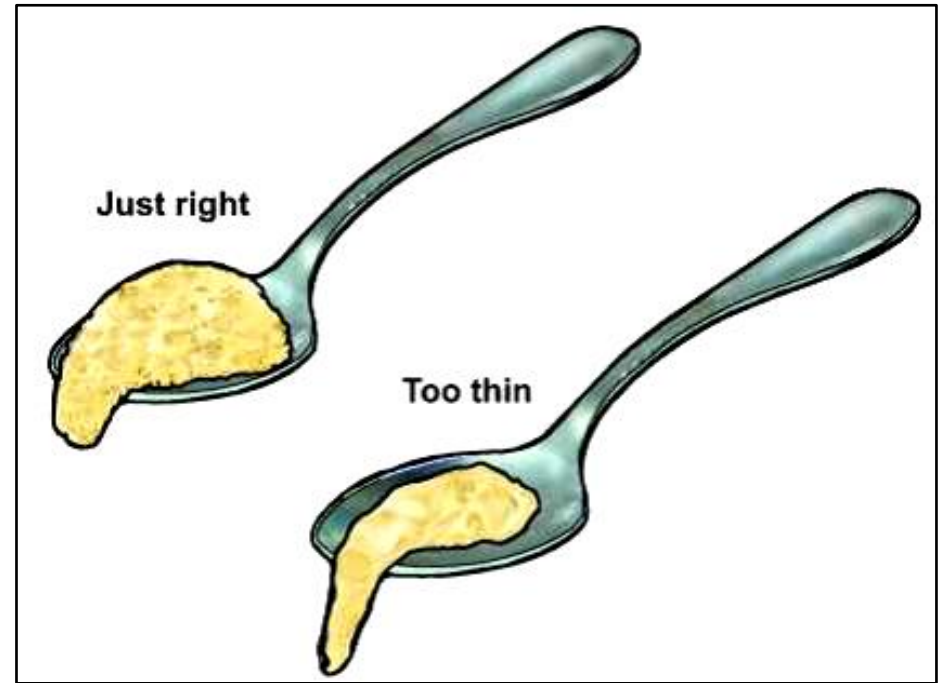
- Provide variety
- **Staples:** Cereals and Legumes
- **Fats** and sugars - improve energy density and taste
- **Foods of animal origin** - good quality proteins, vitamin A and calcium.
- **Vegetables and Fruits** - micronutrients e.g. iron and vitamins.
- Supplements e.g. iron might be required.



Adequacy (Quality)



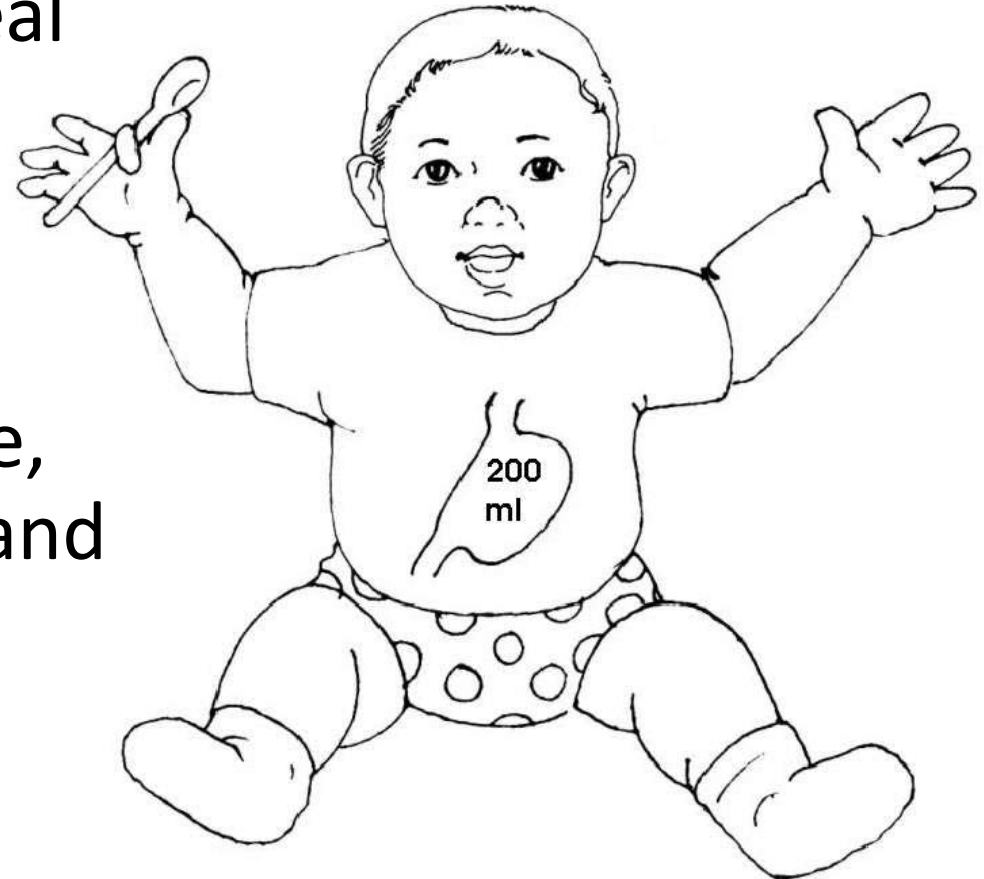
- Right consistency
- Soft
- Easy to digest
- Inexpensive
- Locally available
- Culturally acceptable
- Easily prepared at home



Adequacy

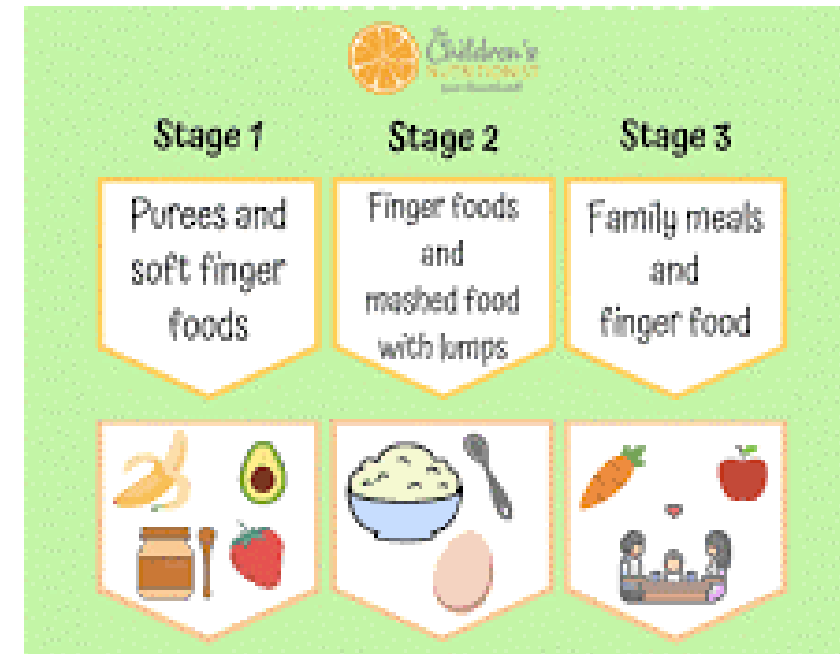


- Small stomach size- Energy dense meal
 - Add sugar / jiggery and ghee/butter/oil
 - Adequate consistency
- Can be enriched - fermented porridge, use of germinated or sprouted flour and toasting of grains before grinding



How to start?

- Start at 6 months with small amounts of food; increase quantity with age, maintaining frequent breast feeding
- Increase food consistency & variety with age
 - Can feed mashed & semi-solids at 6 months;
 - Can feed finger foods by 8-9 months
 - By 12 months, family foods can be eaten



FROM PUREE TO FINGER FOOD
Adding texture to your baby food



Foods to Avoid



- **Tea & coffee:** interfere with iron absorption
- **Aerated beverages:** No nutritional value
- **Too much sugary drinks & Fruit juices:** cause decreased appetite for other nutritious foods and also may cause loose stools.
- **Nuts:** may cause choking



Amount to be offered



Age	Texture	Frequency	Amount of each meal
6 months	Soft porridge, well mashed vegetable, fruits	2 times per day plus frequent breastfeeds	2-3 table spoonfuls
7-8 months	Mashed foods	3 times per day plus frequent breastfeeds	Increasing gradually to more than 3/4 of katori (150ml)
9-11 months	Finely chopped or mashed foods, and foods that baby can pick up	3 meals plus 1 snack between meals plus breastfeeds	a full katori (200ml)
12-24 months	Family foods, chopped or mashed if necessary	3 meals plus 2 snacks between meals plus breastfeeds	more than katori (250ml)

Feeding Techniques



- Feed infants directly & assist older toddlers eat; be sensitive to hunger & satiety cues
- Feed patiently; encourage, but don't force
- If child refuses, experiment with different food combinations, tastes, textures
- Minimize distractions during meals
- Talk to child during feeding; maintain eye contact





Responsive feeding

- **Encourage** child by praising them and their foods
- **Encourage self-feeding** despite spillage
- Fed under supervision in **separate plate** to develop individual identity
- **Forced feeding, threatening and punishment** interfere with development of good / proper feeding habits



Ensuring Food Hygiene



- **Unhygienic feeding**

- Risk of infectious illness (esp. diarrhea) - compromising nutritional status
 - Undermines the parents' confidence leading to delay in CF
-
- Hand washing – both caregiver and child hands
 - Clean water and raw materials to cook food
 - Safe and Hygienic storage - Keeping food covered and serving shortly after preparation
 - Use clean utensils to prepare & serve food
 - No feeding bottles

Feeding the child who is ill



- Encourage the child to drink and to eat - with lots of patience
- Feed small amounts frequently
- Give foods that the child likes
- Give a variety of nutrient-rich foods
- Continue to breastfeed

Feeding during Recovery



- Feed with extra patience
- Give extra breastfeeds as often as child wants
- Feed an extra meal
- Give an extra amount
- Use extra rich foods

Complementary feeding - Key Messages



- Start soon after completing 6 months of age along with continued breastfeeding
- Complementary foods - right consistency, energy dense and variety to meet all nutrient demands of growing child.
- Responsive feeding - fed patiently giving adequate attention and time
- Foods should be prepared, stored and fed hygienically to the children.
- Continue feeding during illness and increase during convalescence.



POSHAN Abhiyaan

PM's Overarching
Scheme for Holistic
Nourishment



सही पोषण - देश रोशन