Summary of frequency and quantity of meals:

Age	Texture	Frequency	Amount of food an average child will usually eat at each meal
6 + to 8 months	Well mashed foods. Start with mashed rice. Continue introducing mashed foods	2-3 main meals per day plus frequent breast feeds. Depending on child's appetite one or two snacks may be offered	Start with 2-3 teaspoonfuls per feed, increasing gradually to a little more than ½ a cup of a 200 ml cup (tea cup)
9 to 11 months	Finely chopped or mashed foods and foods baby can pick up (finger foods)	3-4 main meals plus breastfeeds. Depending on child's appetite one to two snacks may be offered	3/4 of a 200ml cup
12-23 months	Family foods (chopped food or if necessary coarsely mashed food)	3-4 main meals plus breastfeeds after meals. Depending on child's appetite one to two snacks may be offered	1 full 200ml cup or a bit more



Tips for responsive feeding

- Feed infants directly; let older children feed themselves and assist when needed
- Feed slowly and patiently; encourage children to eat but never force feed
- If children refuse many foods, experiment with different food combinations, tastes, textures and methods of encouragement
- Minimize distraction during meals
- Talk to children lovingly during feeding, keep eye to eye contact and try and make meal times interesting to the child

Feeding time should be a pleasant experience. It need not be a battle between caregiver and child.

With increasing age (from around 9 months onwards), a child should be encouraged to eat finger foods and given the opportunity to gradually learn self feeding so that the child is able to self feed by the age of two years. Feeding the older infant and young child along with the other family members will provide learning opportunities for the child by allowing observation of adults and older siblings (who should act as role models) at meals while encouraging the child to self feed and gain independence.

• Feeding during illness:

A common cause for growth faltering in children appears to be the inappropriate feeding practices adopted by caregivers during illness and therefore, the need to pay a lot of attention to feeding a child during a bout of illness which involves a considerable amount of patience as well.

Encouraging an ill child who may or may not be having anorexia (loss of appetite), to eat and drink during illness will help them recover quickly and maintain a normal growth. Care should be taken to offer foods that the child likes, in small amounts and frequently while ensuring the intake of a variety of nutrient-rich foods with continued breastfeeding. Offering energy dense food is essential to an ill child which could be achieved by using oil, thick coconut milk in preparation of food which will also improve the taste and aroma as well. Extra food should be given during convalescence to help the child recover quickly, and continued for some time after recovery to aid the catch up growth in a child who developed growth faltering due to ill health.

Growth Monitoring and Promotion:

Regular assessment of anthropometric indices is the most objective way of assessing a child's growth. In the National Growth Monitoring and Promotion Programme for under five children, the indicators used for growth monitoring are weight for age and length/height for age (length is measured up to two years of age and height thereafter) which can be carried out at child welfare clinics or a field weighing posts and at well baby clinics in curative establishments.

The following are the recommendations of the Ministry of Health, Sri Lanka regarding assessment of growth;

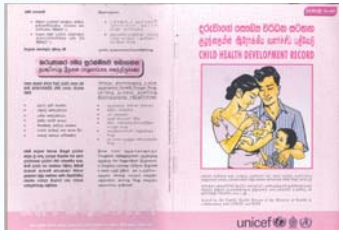
- Weight for age to be assessed monthly up to 2 years of age and thereafter once in every 3 months up to the age of five years. However if a child in having any nutritional problem, irrespective of age, monthly weighing is recommended.
- The recommended ages for measuring length for age, are at 4, 9, 18 and 24 months; in case of a child with any nutritional problem, every 2 months up to 2 years of age.
- Height for age is assessed every 6 months from 2 years of age up to 5 years. However if a child is having any nutritional problem, height should be measured every 3 months from 2 to 5 years.

The Child Health Development Record (CHDR):

The CHDR is the key document in the National Growth Monitoring and Promotion Programme for under five children, developed and issued by the Family Health Bureau of the Ministry of Health, Sri Lanka, which is a comprehensive health record for the use of children from birth until 18 years of age (see picture 4).

All children who are born in Sri Lanka are issued a CHDR at the institution of birth (both government and private sectors) and in case of a home delivery from the office of the Medical Officer of Health.

Child Health Development Record



The difference in growth rate between boys and girls is addressed in the CHDR by the inclusion of sex specific growth charts [in separate books for boys (in blue) and girls (in pink)] that are used for assessment and monitoring of growth (picture 5a, 5 b & 5c).

Vital information needed by parents and caregivers to optimise the nutrition and health status of their children are included in the CHDR (light yellow pages) , covering a range of topics such as newborn care, breastfeeding, complementary feeding, immunization and psychosocial development; hence the importance of encouraging the parents and caregivers of infants and young children to read the CHDR which will in turn ensure increased parent involvement in health and welfare of their children.

Kangaroo Mother Care: a cost effective intervention to manage low birth weight babies

Kangaroo mother care (KMC) is early, prolonged and continuous skin to skin contact between a mother and her newborn low birth weight (LBW) infant, both in hospital and after discharge. It is an important intervention in the newborn care programme in Sri Lanka as 16.6% of babies are born with a low birth weight (DHS, 2007). There is wide district variation in LBW with some districts having rates as high as 30% (DHS, 2007). More over LBW is central to many of the morbidities experienced during newborn period such as septicaemia, congenital abnormalities, prematurity etc.

There is evidence to show that KMC after initial stabilization is safe in terms of mortality and reduce severe morbidity with fewer readmissions (Sloan et al 1994, Charpak et al 1994). In the Lancet review (2005) KMC has been identified along with 16 other interventions that have adequate evidence of effect on neonatal deaths. Also it has been shown that such interventions are highly cost effective if packaged and delivered within other programs and it is estimated that when these interventions reach 99% of women and babies, up to 72% of newborn deaths could be prevented.

Why is it called Kangaroo Mother Care?

Kangaroo Support

A newborn baby kangaroo is very immature at birth and very small in size

The mother kangaroo's pouch provides warmth, safety and a constant supply of food (milk) to the baby

Kangaroo position
Skin-to-skin on the mother's chest
Secured with a wrap

Kangaroo nutrition
Exclusive breastfeeding whenever possible

Kangaroo discharge
Mother continues KMC practice at home after discharge

Kangaroo Support
Health care staff provide support to the mother to take care of her infant in the hospital

Family support/community health workers support of mother in practicing KMC at home

KMC benefits

Community setting

- Early discharge from hospital
- Early recovery of the newborn (faster weight gain, exclusive breastfeeding)
- Family can support in care of the baby
- Cost effective, safe mode of transportation eg; attending clinics
- Humanization of care (mother/father and infant together)

Benefits to the baby

- Improved cardiac and respiratory stability
- Fewer episodes of desaturation and apnoea
- KMC can successfully treat mild respiratory distress
- Improved gastrointestinal function
- Higher initiation & duration of breastfeeding
- Reduces energy expenditure and satisfactory weight gain
- Protection against infections
- Decrease in infections in poorly equipped units but nowhere an increase in infections
- Effective thermal control
- Baby's temperature is maintained within a narrow temperature range
- A thermal synchrony develops between mother & baby
- Infants are much less stressed and this provides neurological protection to the infant and the result is: Improved neurodevelopment, Better organised sleep patterns, More mature and organised electrical brain activity

Benefits to the mother

- The mother's confidence in caring for her infant is boosted
- Improved bonding between mother and infant due to the physical closeness between them
- Mothers are empowered to play an active role in their infants care
- Mothers are enabled to become the primary care giver of their infants
- Breast feeding is promoted

Benefits to the Hospital

- Significant cost-savings as well as better outcomes
  - Less dependence on incubators

Critical requirements for the implementation for KMC

- Information and support to mothers
- Training of health personal – National guidelines, Staff training, include in nursing and midwifery basic training curriculum
- Introduction in the Essential Newborn Care Package
- Breast feeding and discharge policies.
  - Less nursing staff necessary
  - Shorter hospital stay
- Improved morale & quality of care for better survival rates.

Important of Implimentation at diferent setting

- Skilled persons available
- Basic equipment and supplies for the LBW newborns available
- But staff and equipment do not meet the need
- Suboptimal care - > 1 baby per incubator, limited hygiene, inadequate thermal control, insufficient clinical surveillance and follow up, limited contact with mothers, exclusive breastfeeding insufficiently promoted

Even if health facilities have adequate human, material and financial resources for highly sophisticated neonatal care, which is rarely the case in developing countries, care is not usually complemented by humanization of care (mother and infant separated, formula feeding with bottle feeding)

MCH quarterly
THE QUARTELY NEWSLETTER FROM THE FAMILY HEALTH BUREAU