



# MPA MODULE

# NUTRITION

# 10

FACILITATOR SLIDES AND NOTES

National Nutrition  
Program



**USAID**  
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Academy for Educational Development





# OBJECTIVE OF MPA 10

- To improve the nutritional status of women and under-five children, and promote and support positive nutrition practices.

# NOTES:

Slide 1 : MPA Module 10 Nutrition  
Facilitators slides and notes





# OBJECTIVE OF MPA 10

- To strengthen the quality and accessibility of nutrition services, especially for women and under-five children.

# NOTES:

Slide 2 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# OBJECTIVE OF MPA 10

- To increase the knowledge and skills of health center staff about nutrition and strengthen their ability to integrate nutrition into their work.

# NOTES:

**Slide 3 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# **OBJECTIVE OF MPA 10**

## **National Programs For Nutrition:**

- 1.** Infant and Young Child Feeding (IYCF)  
including growth promotion and  
assessment
- 2.** Vitamin A
- 3.** Iron
- 4.** Iodine



## PROGRAM COMPONENTS

- 1. Infant and Young Child Feeding** (Baby Friendly Hospitals, Baby Friendly Communities, implementation of the Sub-degree for the Marketing of Breast Milk Substitutes, national communication activities such as annual World Breast Feeding Celebrations)

### IYCF includes:

**Growth promotion and assessment** (health education and counseling) to promote breast feeding and appropriate complementary feeding; weighing of infants attending health centers; health education and referral as necessary, treatment of severely malnourished children at referral hospitals

- 2. Vitamin A supplementation** (universal supplementation) for children 6-59 months twice per year around the month of May and November; universal supplementation of post partum women within the first six weeks of delivery; disease targeted vitamin A during measles outbreaks; special immunization campaigns; supplementation for children with persistent diarrhea or severe malnutrition; and women of reproductive age who have clinical signs of vitamin A deficiency; health education about vitamin A
- 3. Iron** (Iron and folate supplementation) for pregnant and post partum women; treatment of anemia in women of reproductive age, pregnant women and young infants; weekly iron and folate supplement for women of reproductive age to prevent anemia; health education about anemia
- 4. Iodine** (Iodine fortification of salt) health education and promotion of iodized salt and foods containing iodine

# **MPA 10 TRAINING WILL CONTRIBUTE TOWARDS THE ACHIEVEMENT OF THE GOAL AND OBJECTIVES OF THE HEALTH STRATEGIC PLAN 2008-2015 (HSP 2):**

The Health Strategic Plan 2008 -2015 (HSP 2) has 3 goals.

Goal 1 is to reduce maternal, new born and child morbidity and mortality with increased reproductive health.

**One of the expected outcomes is improved mother and child nutritional status.**

## The 3 goals of the Health Strategic Plan 2008 -2015 are:

### Goal 1:

Reduce maternal, new born and child morbidity and mortality with increase reproductive health

#### Objectives of goal 1:

- ▶ To improve the nutritional status of mothers and children
- ▶ To improve access to quality reproductive health information and services
- ▶ To improve access to essential maternal and newborn health services and better family care practices
- ▶ To ensure universal access to essential child health services and better family care practices

### Goal 2:

Reduce morbidity and mortality of HIV/AIDS, Malaria, TB, and other communicable diseases

### Goal 3:

Reduce the burden of non-communicable diseases and other health problems

# **MPA 10 TRAINING WILL CONTRIBUTE TOWARDS THE ACHIEVEMENT OF THE OBJECTIVES OF THE NATIONAL NUTRITION STRATEGY:**

## **The National Nutrition Strategy**

**2008-2015**

The goal of the Nutrition Strategy is to reduce maternal and child morbidity and mortality by improving the nutritional status of women and children in Cambodia.

- Key result 1** - Reduction in malnutrition and micronutrient deficiencies in young children
- Key result 2** - Reduction in maternal anemia and chronic energy deficiency
- Key result 3** - Increased leadership and technical nutrition capacity of government health staff

This is the first Cambodian National Nutrition Strategy 2008- 2015 (NNS). The NNS was developed by the National Nutrition Program and Nutrition Working Group

The purpose of the nutrition strategy is to provide a clear focus and long term direction for addressing maternal and child under nutrition in Cambodia. The strategy will contribute towards the achievement of the Cambodia Millennium Development Goals related to poverty, maternal child health and HIV/AIDS .

The goal of the strategy is to reduce maternal and child morbidity and mortality by improving the nutritional status of women and children in Cambodia.

## **Priority interventions:**

- ▶ Immediate and exclusive breastfeeding to 6 months
- ▶ Continued breastfeeding to 2 years, with appropriate (quantity, quality, frequency) of complementary foods from 6 months onward
- ▶ Appropriate nutritional care of the sick child, including recuperative feeding and rehabilitation of children with severe malnutrition
- ▶ Adequate intake of vitamin A, iron and iodine from dietary sources and through supplementation
- ▶ Adequate maternal nutrition

# **MPA 10 TRAINING WILL CONTRIBUTE TOWARDS THE ACHIEVEMENT OF THE OBJECTIVES OF THE CAMBODIA CHILD SURVIVAL STRATEGY :**

**The Cambodia Child Survival Strategy 2006 - 2015 promotes national scale up of:**

- Early initiation of breast feeding
- Exclusive breastfeeding for six months
- Appropriate complementary foods at six months
- Vitamin A supplementation 2 x per year for children 6-59 months

# NOTES:

The Cambodia Child Survival Strategy (CCSS) developed in 2005 outlines the MoH's approach to reducing child mortality in Cambodia and achieving the Cambodia Millennium Development Goal 4, which aims to reduce under-five mortality rate (U5MR) to 65 per 1000 live births and infant mortality to 50 per 1,000 live births by 2015.

The strategy aims to achieve universal coverage of a limited package of essential evidence-based, cost-effective interventions that have an impact on reducing child mortality. The 12 specific high-impact child survival interventions ( Score Card Interventions) that need to be scaled-up throughout Cambodia so that all under-5's have access to them are:

1. Early initiation of breastfeeding      \*\* **NUTRITION**
2. Exclusive breastfeeding                \*\* **NUTRITION**
3. Complementary feeding                \*\* **NUTRITION**
4. Vitamin A                                    \*\* **NUTRITION**
5. Measles vaccine
6. Tetanus toxoid
7. Insecticide treated nets
8. Vector control ( Dengue)
9. Oral Rehydration Therapy (ORT)
10. Antibiotics for pneumonia
11. Malaria Treatment
12. Skilled Birth Attendance

# WHY ARE NUTRITION INTERVENTIONS IMPORTANT?

## **Child mortality is high:**

Approximately 60,000 children under 5 die each year (50% of deaths are associated with malnutrition)

(From: Child Survival Strategy for Cambodia, April 2007)

## **Maternal mortality is high:**

Approximately 1,500 - 2,000 women die each year (Adjusted from: CDHS 2005)

(50% of deaths are due to haemorrhage.

Fifty seven per cent of pregnant women in Cambodia are anemic)

20% of women have chronic energy deficiency (malnutrition defined as BMI < 18.5)



Under-five and infant mortality remain high in Cambodia with 83 children per 1000 live births dying before they reach 5 years old, and 65 infants per 1000 live births dying before they reach one year old (CDHS 2005)

**Most Cambodian children are dying from a few preventable and treatable conditions including:**

- ▶ neonatal causes (30%)
- ▶ acute respiratory infections (pneumonia 21%)
- ▶ diarrhoeal diseases (17%), HIV/AIDS (2%)
- ▶ measles (2%), injuries (2%)
- ▶ malaria (1%),

***\*\*\*It is important to note that 50% of all under five mortality is associated with malnutrition\*\*\****

**The maternal mortality ratio in Cambodia is estimated to be 372 per 100,000 live births ( CDHS 2005)**

**The main causes of maternal mortality are:**

- 1.** Severe bleeding (hemorrhage)
- 2.** Infection
- 3.** Complications of unsafe abortion
- 4.** Eclampsia
- 5.** Obstructed labour

**Note:** Recent research has shown that any type of anemia even mild and moderate anemia increases a woman's risk of maternal mortality ( Stolftzus et al, 2006). In Cambodia 57% of pregnant women are anemia and only 18% report taking 90 Iron Folate supplement during their pregnancy ( CDHS 2005)

# NECESSITY OF NUTRITION INTERVENTIONS FOR WOMEN

## CDHS 2005 results

- **Anemia in women**  
47% of women of reproductive age (WRA)  
57% of pregnant women
- **Chronic energy deficiency in women (Malnutrition)**  
20 % of WRA with a BMI < 18.5
- **Poor Iron Folate supplement adherence** – only 18% of pregnant women report taking 90 IFA tablets during pregnancy (CDHS 2005)
- **Post partum Vitamin A uptake** – only 27% of post partum women received vitamin A ( CDHS 2005)
- **Approximately 8% of all births are low birth weight infants**

# NOTES:

Slide 9 : MPA Module 10 Nutrition  
Facilitators slides and notes

People need to have good nutrition throughout their life cycle. This is especially important for women. If an infant girl doesn't have adequate nutrition in the first two years of her life she becomes stunted. As an adolescent if she doesn't have good nutrition she will become chronically malnourished.

If a stunted women becomes pregnant she is at risk of complications during pregnancy and delivery, and has a higher risk of maternal mortality.

Her new born baby is likely to be born with a low birth weight and be anemic. If her new born baby is not fed adequately during the first two years he/she is at risk of being stunted and anemic, and will continue to have problems throughout adolescence. As an adult if she becomes pregnant she is at higher risk of complications, maternal mortality and delivering a low birth weight baby.

**Poor nutrition becomes a vicious cycle – passing from one generation to another.**

# NECESSITY OF NUTRITION INTERVENTIONS FOR CHILDREN

## CDHS 2005

- **Stunting** - (44% of under five children are stunted)
- **Underweight** - ( 28% )
- **Wasting - acute malnutrition** (8%)
- **Anemia** (62%)
- **Initiation of breast feeding within one hour** - (35%)
- **Pre-lateal feeds** - ( 56% of infants received a prelacteal feed)
- **Appropriate complementary feeding at 6-8 months** - 33%
- **Vitamin A coverage** (35%)

**Cambodia is one of the 36 high burden countries in the world for maternal and young child under nutrition. This is reflected in the child health indicators.**

44% of Cambodian children are stunted (chronic malnutrition). Stunting reflects a failure to receive adequate nutrition during the first two years of life. After a child is two years old it is almost impossible to correct stunting.

28% of Cambodian children are underweight. Children who are lower in weight than they should be for their age are underweight. Underweight takes into account both acute and chronic malnutrition.

8% of Cambodian children are wasted or acutely malnourished. Wasting is when a child is of a lower weight than they should be for their height. Wasting represents the failure to receive adequate nutrition in the recent past. It may be the result of inadequate food intake or a recent episode of illness, causing loss of weight and the onset of malnutrition.

Anemia in children is a serious problem in Cambodia with 62% of children under five anemic. Anemia can result from blood loss, malaria, genetic conditions, and other causes. Iron deficiency anemia (IDA) describes anemia resulting from insufficient iron intake. Anemic infants and children grow more slowly than non-anemic infants and children. They are apathetic and anorexic, do not have enough energy to play, and have trouble learning.

Only 33% of mothers give appropriate complementary feeding. After six months breast milk should be continued, but it is not enough to meet the nutritional requirements of a rapidly growing child. Appropriate complementary food means a variety of nutritious foods, of the right amount, of the right consistency, and the correct frequency according to the infants age.

# OBJECTIVES

## DAY 1

- 1.** To introduce the Nutrition MPA Module 10 to the participants
- 2.** To provide an overview of nutrition, the nutrition situation in Cambodia and Cambodia nutrition programs
- 3.** To introduce job aids', as these are the key to effective counselling

# NOTES:

Slide 11 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# SKILLS OBJECTIVES OF DAY 1

**At the end of the day, participants are able to:**

1. Communicate with confidence why they are the important people to deliver nutrition messages and counsel parents and communities on nutrition issues



# NOTES:

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Facilitators slides and notes

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# SKILLS OBJECTIVES OF DAY 1

**At the end of the day, participants are able to:**

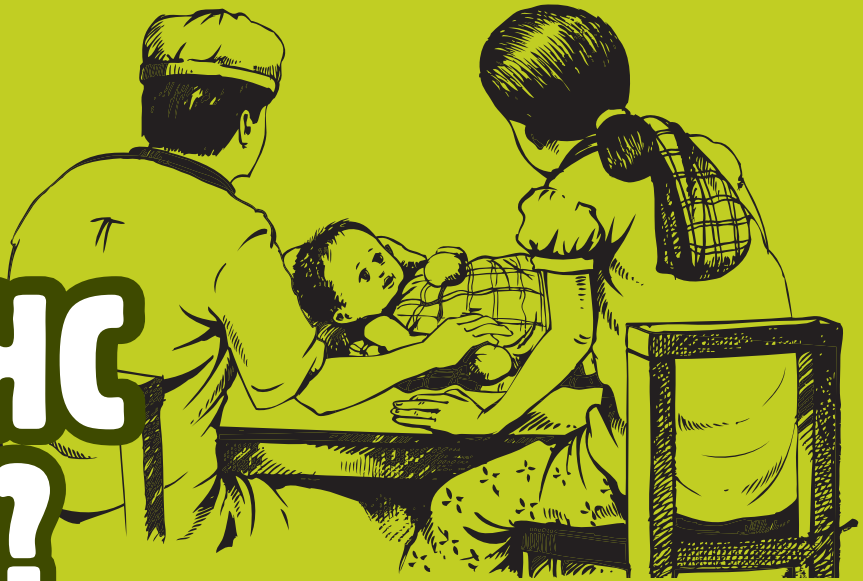
- 2.** Communicate their responsibilities for nutrition activities
- 3.** Counsel parents on food selection covering the different food groups in balanced meals for target groups

# NOTES:

**Slide 13** : MPA Module 10 Nutrition  
Facilitators slides and notes



# WHY HC STAFF?



- Have the trust of the communities
- Know the situation in the communities
- HC is the closest health facility
- Meet frequently with parents, communities and children
- Can mobilize local resources

# NOTES:

**Slide 14 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# RESPONSIBILITIES FOR NUTRITION

- Educate about nutrition
- Assess nutrition status of women and children
- Provide supplements

# NOTES:

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Facilitators slides and notes

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# RESPONSIBILITIES FOR NUTRITION

- Provide treatment
- Provide support, training and supervision to village volunteers
- Record and report and use information about nutrition activities



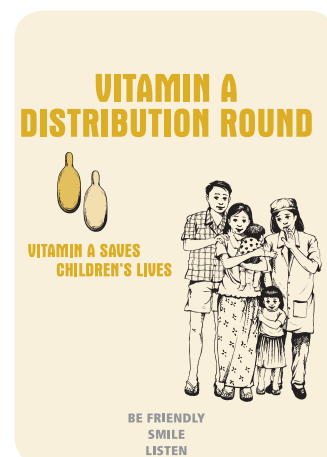
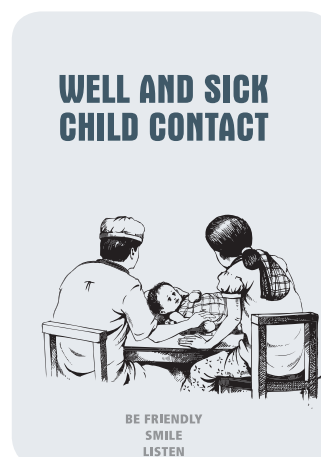
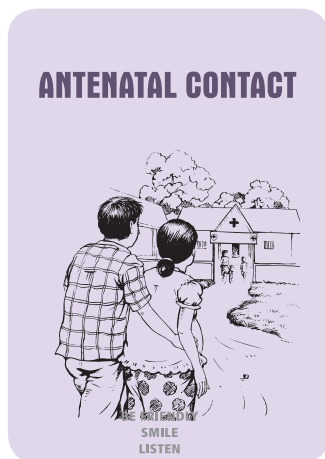
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Facilitators slides and notes

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# 6 KEY CONTACTS FOR NUTRITION

1. Antenatal contact
2. Delivery contact
3. Post partum contact
4. Immunization contact
5. Well and sick child contact
6. VAC distribution contact



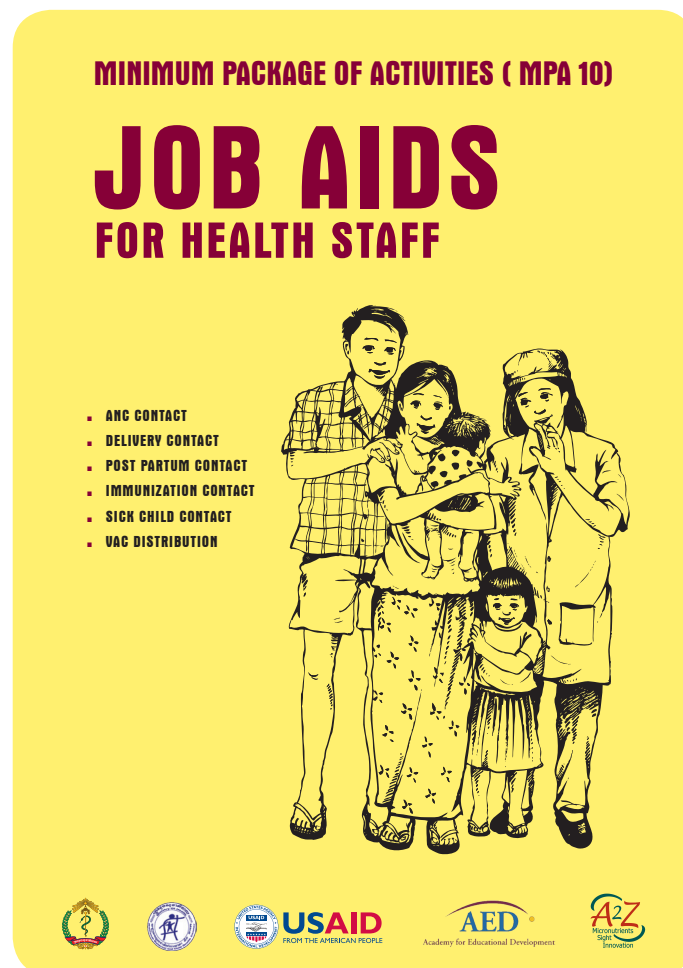
# NOTES:

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Facilitators slides and notes



# JOB AIDS

- Different for each contact
- Integrate HC staff tasks with nutrition tasks

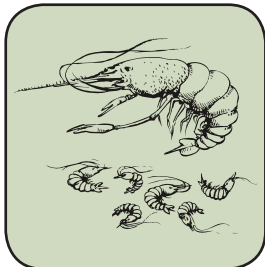
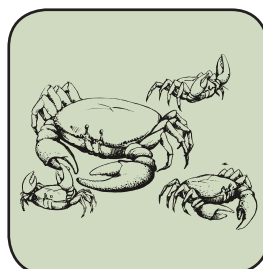
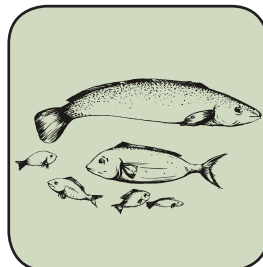
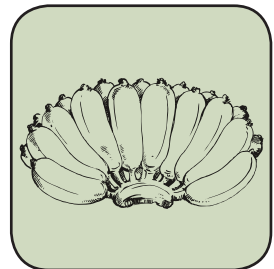
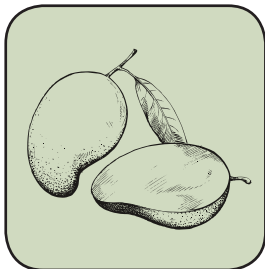
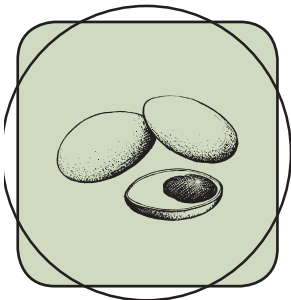


# NOTES:

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Facilitators slides and notes

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# NUTRITION IS EVERYTHING WE EAT AND DRINK



# NOTES:

**Nutrition is the taking in and use of food and liquids by the body. Nutrition is a 3-part process.**

- 1.** First, food or drink is consumed.
- 2.** Second, the body breaks down the food or drink into nutrients.
- 3.** Third, the nutrients travel through the bloodstream to different parts of the body where they are used as “fuel” and for many other purposes. To give the body proper nutrition, a person has to eat and drink enough of the foods that contain key nutrients.

<b>FOODGROUPS</b> What are they called?	<b>What do they do?</b>	<b>Where do you find them?</b>
<b>Carbohydrates</b> <b>Fats</b>	<b>Give you energy</b>  <b>Provide energy and help in body building.</b>	<b>sugary and starchy foods like rice bread, potatoes, taro cereals pasta, and some fruit and vegetables.</b>  <b>dairy products, meats</b>
<b>Proteins</b>	<b>Help your body grow and repair itself.</b>	<b>fish, meats, poultry, eggs, dairy products, beans and nuts</b>
<b>Vitamins, minerals / micronutrients</b>  <b>Fibre</b>	<b>Vitamins and micronutrients are good for protecting your body and keeping it healthy.</b>  <b>Helps you digest food</b>	<b>Vitamins are mostly found in fresh fruit and vegetables and dairy products (milk, and eggs). Minerals/micronutrients are in lots of foods but are especially in red meat, liver and fresh fruit and vegetables.</b>  <b>Fruit and vegetables</b>

# ENERGY RICH FOODS (CARBOHYDRATES AND FATS)

- Rice
- Noodles
- Maize
- Pumpkin
- Sweet potato
- Yam
- Taro
- Cassava
- Fat / oil
- Sugar





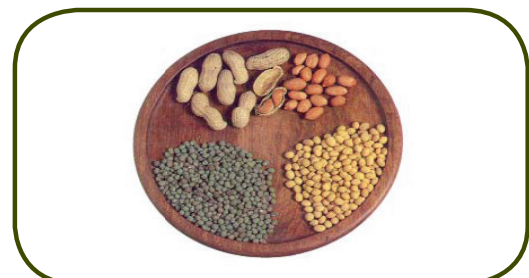
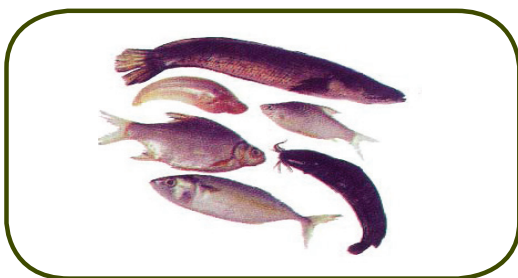
# NOTES:

Slide 20 : MPA Module 10 Nutrition  
Facilitators slides and notes



# IRON AND PROTEIN RICH FOODS

- Fish
  - Pork
  - Beef
  - Chicken
  - Liver
- And other animal products
- Tofu
  - Soya milk



# NOTES:

Slide 21 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# VITAMIN A RICH FOODS

- Egg yolk
- Fish, chicken
- Liver
- Tofu
- Dark green leafy vegetables
- Ripe orange fruits and orange and green vegetables
- Breast milk



# NOTES:

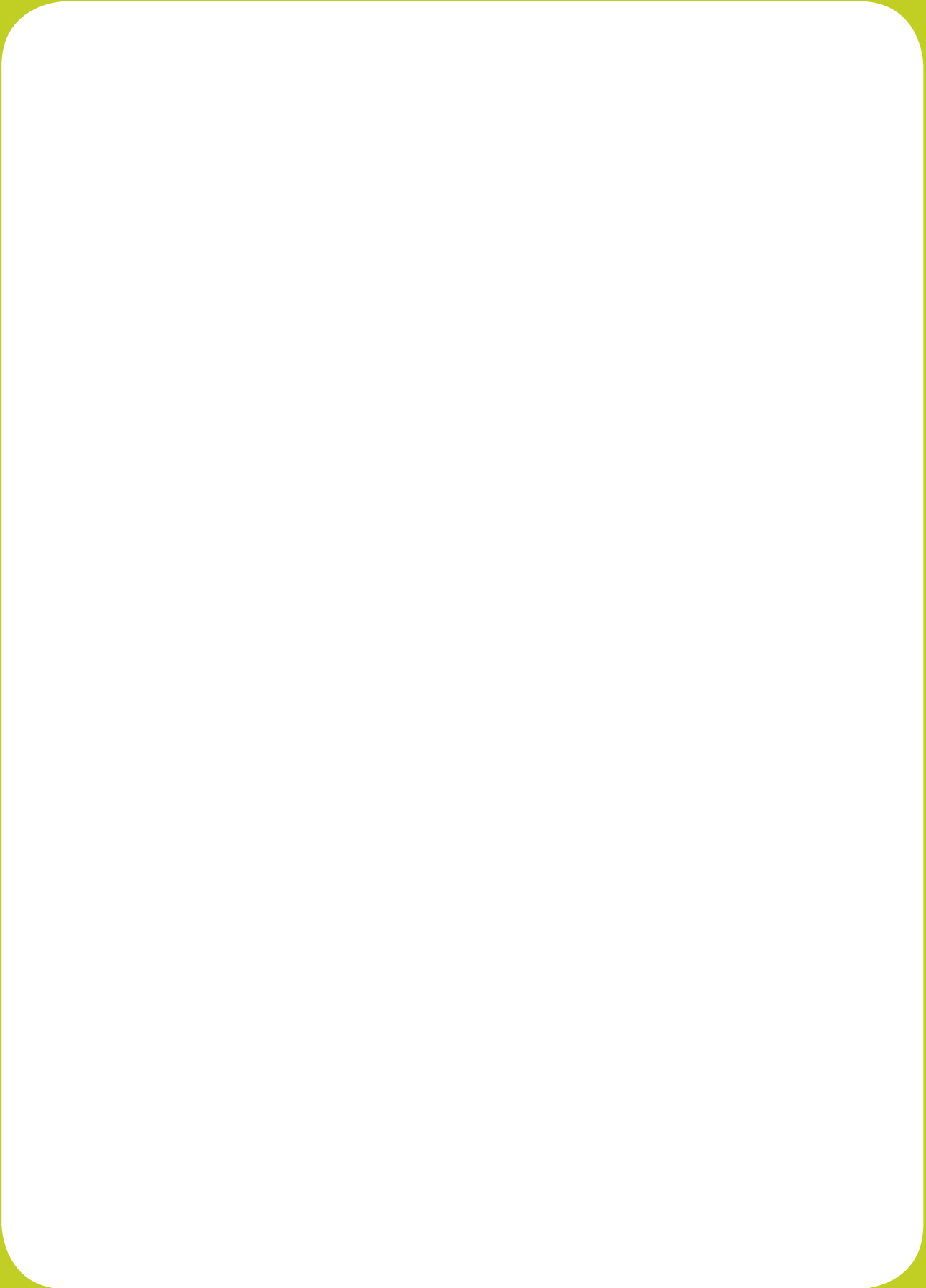
Slide 22 : MPA Module 10 Nutrition  
Facilitators slides and notes





# NOTES:

**Slide 23** : MPA Module 10 Nutrition  
Facilitators slides and notes





# IMPORTANCE OF NUTRITION

- Healthy pregnancies
- Safer deliveries
- Healthy babies
- Promotes child survival
- Stronger children
- More productive members of society



# NOTES:

Slide 24 : MPA Module 10 Nutrition  
Facilitators slides and notes

Good nutrition is important for everyone. A healthy diet helps pregnant women have a healthy pregnancy and safe delivery. A healthy diet helps children grow, develop and do well in school. A healthy diet enables people of all ages to work productively and feel their best.

**IMPORTANT:** *What people eat can also help reduce the risk for chronic diseases, such as heart disease, certain cancers, diabetes, stroke, and bone diseases. Diabetes, heart disease and high blood pressure are becoming serious health problems in Cambodia.*

Proper nutrition means getting both enough calories and the proper nutrients. A nutritious diet is one that contains a variety of foods from all the different food groups.



## **WHEN CHILDREN'S NUTRITION IS POOR...**

### **Children are :**

- malnourished
- develop less well
- physically less strong
- mentally less developed

# NOTES:

**Slide 25 : MPA Module 10 Nutrition**  
Facilitators slides and notes

It is essential that infants receive good nutrition in the first two years of their life, if they are to grow up to be healthy and productive members of society.

Children who are malnourished are more likely to become ill, are more likely to have longer and more severe episodes of illness, and are more likely to die.

A child who is malnourished in the first two years of life will be stunted all their life. Malnutrition in the first two years also affect a child's intelligence.

# WHEN WOMEN'S NUTRITION IS POOR...



## **Women are at risk of:**

- Problems during pregnancy and delivery
- Less power to work and care for family
- More vulnerable to infections
- Slower recovery

# NOTES:

**Slide 26 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Good nutrition during pregnancy is very important. What a woman eats during her pregnancy not only affects her health but also her baby's health, development and future life.

**Some problems caused by poor nutrition during pregnancy are:**

- ▶ Maternal and infant anemia
- ▶ Low weight gain during pregnancy
- ▶ Decreased resistance to infections
- ▶ Higher risk of pregnancy and delivery complications
- ▶ Low birth weight baby

*What a pregnant woman eats and how her child is fed during the first two years of life can program the child for a lifetime of good or bad health.*



# **PERIODS OF HIGHER DEMAND FOR NUTRITIOUS FOODS**

- Pregnancy
- Breastfeeding women
- Periods of rapid growth (infants and children)
- Recovering from illnesses

# NOTES:

**Slide 27 : MPA Module 10 Nutrition**  
Facilitators slides and notes

During pregnancy a woman needs an extra meal per day to meet the demands of the growing fetus. A pregnant woman needs a variety of foods from all the three food groups. A pregnant woman should gain 7kgs or more during her pregnancy.

Young children grow and develop rapidly during the first two years of life. The food they eat in the first two years will affect their health and intelligence for the rest of their life.

During illnesses the body needs additional energy and nutrients to recover.

# NUTRITION FOR SICK PEOPLE



## **Sick people need:**

- Extra meals
- Foods they like to eat
- Varied meals
- Vegetables, fruits, fish and meat  
– rich in vitamins and micronutrients



## **Sick children less than six months of age**

Sick infants less than six months of age should receive more frequent breastfeeding than usual, and for 2 weeks after illness during the recovery period. If an infant with diarrhea shows signs of dehydration (sunken eyes, dry lips and tongue, and not passing urine), the infant should be taken immediately to the closest health facility. Mothers and health care volunteers in the community should be educated to recognize signs of dehydration.

## **Sick Children 6-59 months of age**

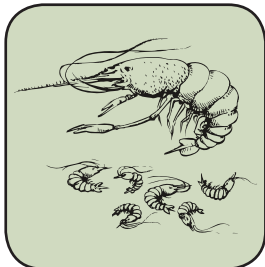
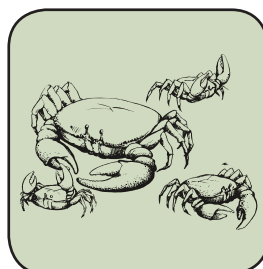
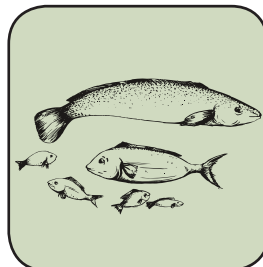
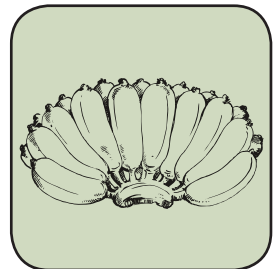
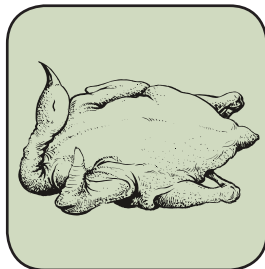
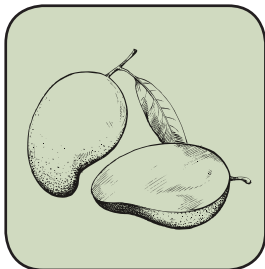
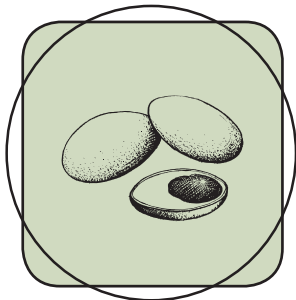
Sick children 6-59 months of age should increase their fluid intake, including more breastfeeding, and for 2 weeks after the illness during the recovery period. Caregivers should encourage the sick child to eat soft, varied, appetizing favorite foods. After illness, children should be given one extra meal per day for at least 2 weeks (recovery period).

Mothers and health care volunteers in the community should be educated on how to prepare and administer oral rehydration therapy to children with diarrhea. If a child with severe diarrhea shows signs of dehydration (sunken eyes, dry lips and tongue, and not passing urine), the child should be taken immediately to the closest health center or hospital.

## **Adults**

If sick people do not eat enough, they use their body fat and muscles for energy and nutrients. They lose weight and become under-nourished. Their immune systems may become less effective and they are less able to fight infections. Sick people often lose or use more water than usual (e.g. during diarrhoea or fever). They need plenty of clean, safe water. If people are ill for more than a few days, they need a variety of foods to help their immune systems recover and to prevent weight loss. Families should give small, frequent meals that contain a combination of foods.

# EXERCISE A



# NOTES:

Slide 29 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# EXERCISE B: TARGET GROUPS AND NUTRITION

Target Group	Extra Meal	Smaller Amounts	Breast feed	Complementary Foods 'Babor Kroeung'	Snacks	Eat Family Foods Chopped or mashed as necessary
Pregnant women	X					
Growing Children						
People and children recovering from illness						
Children 0-6 months						
Children 7- 11 Months						
Children 12 -24 months						
Children above 24 months						

# NOTES:

Explain to participants that they have to work in pairs to complete the table. Tell them they can use the nutrition chapter in the manual for background information.

## Instruct the participants:

- ▶ Look at the table. On the left side are different groups of target groups. The columns give activities.
- ▶ Put crosses (X) when the activities in the columns apply for the target groups on the left. There could be more crosses for each target group.  
**Example:** *Pregnant women should eat an extra meal a day.*
- ▶ After 20 minutes facilitator provides them with the right answers, using the sheet.

# OBJECTIVES OF DAY 2

- To introduce the IYCF program
- To train IYCF skills and knowledge
- To practice breast feeding counselling
- To practice growth promotion counselling and growth assessment
- To use the Child Health Card

# NOTES:

**Slide 31** : MPA Module 10 Nutrition  
Facilitators slides and notes



# SKILLS OBJECTIVES OF DAY 2

**At the end of the day participants are able to:**

- 1.** Effectively communicate while counselling women and caregivers
- 2.** Recognize signs of malnutrition and counsel mothers and caregivers about appropriate feeding practices



# NOTES:

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Facilitators slides and notes

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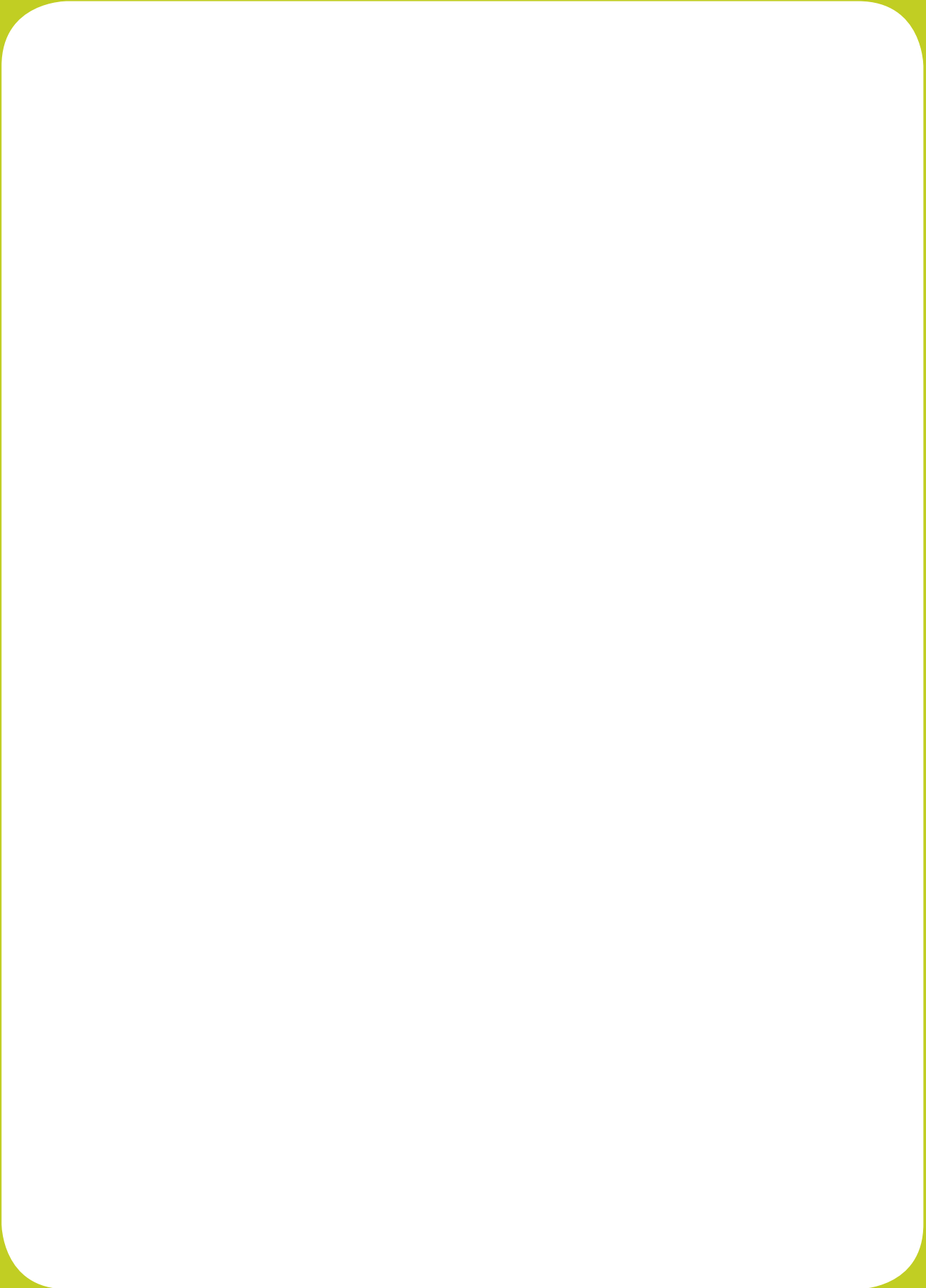
# **SKILLS OBJECTIVES OF DAY 2**

**At the end of the day participants are able to:**

- 3.** Counsel mothers effectively on breastfeeding practices
- 4.** Counsel mothers and caregivers on appropriate complementary feeding
- 5.** Communicate growth promotion messages and conduct growth assessment, including recording on the Child Health Card

# NOTES:

**Slide 33** : MPA Module 10 Nutrition  
Facilitators slides and notes



# EFFECTIVE COMMUNICATION

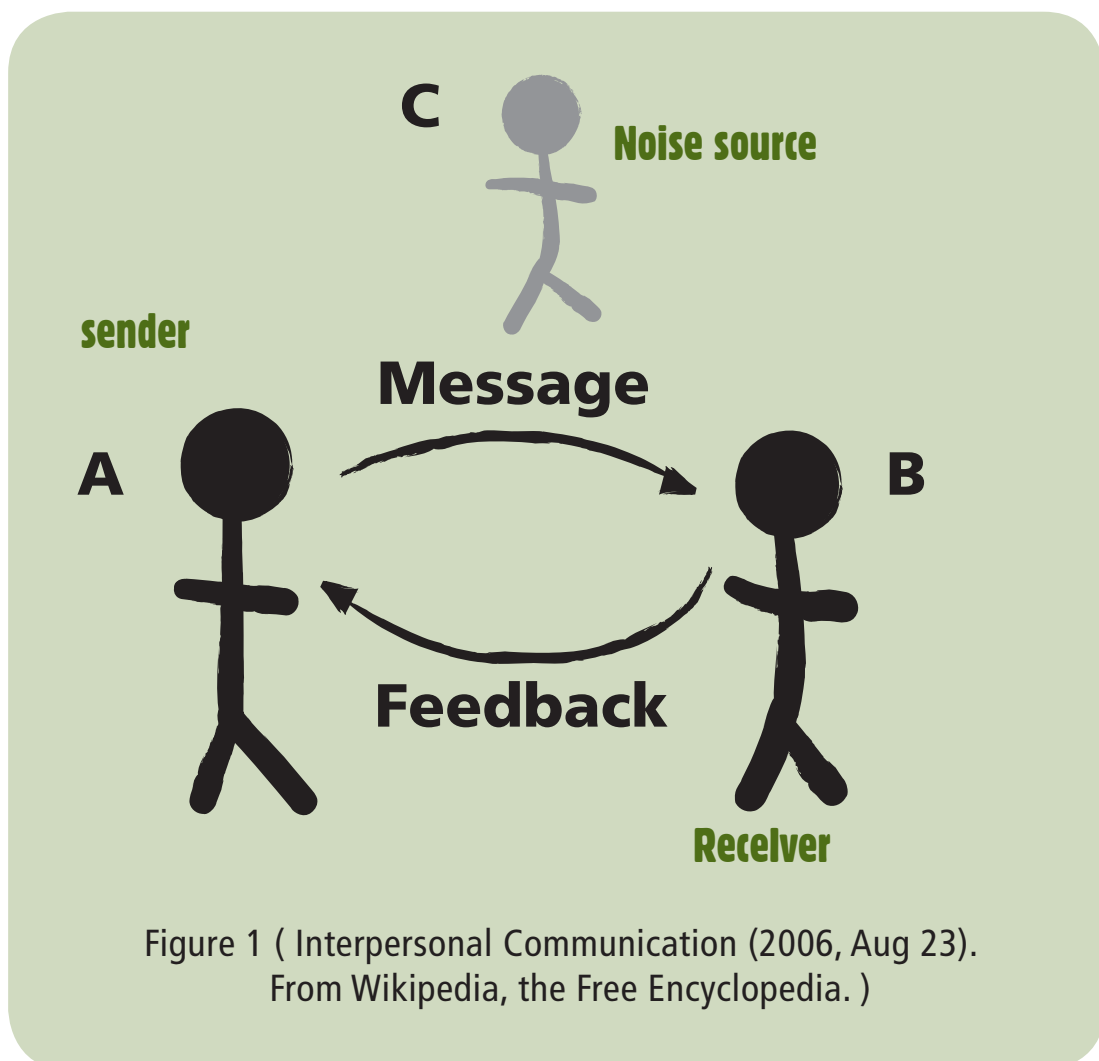
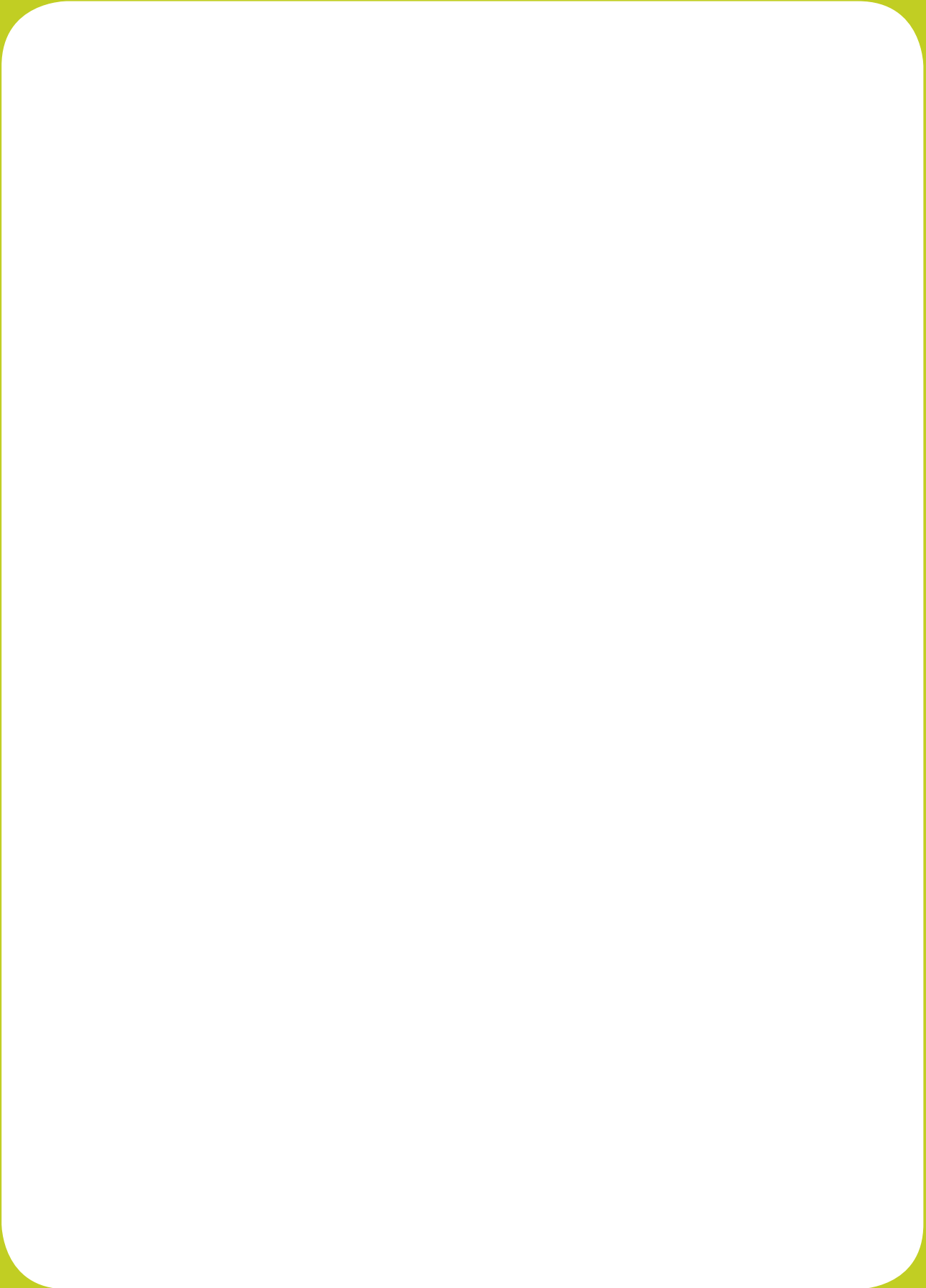


Figure 1 ( Interpersonal Communication (2006, Aug 23).  
From Wikipedia, the Free Encyclopedia. )

# NOTES:

Slide 34 : MPA Module 10 Nutrition  
Facilitators slides and notes





# MESSAGE

- Clear
- Simple language
- Short
- Easy to understand
- Uses pictures

# NOTES:

**Slide 35 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# SENDER

- Calm
- Friendly
- Speaks clearly



# NOTES:

Slide 36 : MPA Module 10 Nutrition  
Facilitators slides and notes





# RECEIVER

- Pays attention
- Wants to listen
- Asks questions for clarification

# NOTES:

**Slide 37** : MPA Module 10 Nutrition  
Facilitators slides and notes





# FLIPCHART

- Pictures
- Big letters
- As little text as possible
- Colors

# NOTES:

Slide 38 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# INFANT AND YOUNG CHILD FEEDING

Promotes good feeding practices

**in order to**

Promote growth and good health

# NOTES:

**Slide 39** : MPA Module 10 Nutrition  
Facilitators slides and notes

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# IMPORTANCE OF IYCF

- Increased child survival chances
- Better physical development and growth
- Better mental development
- Better economic situation for family



# NOTES:

Slide 40 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# EFFECTS OF MALNUTRITION

- Illnesses and death
- Weaker physical development
- Weaker mental development
- Weaker economic situation of family

## **Child mortality is high in Cambodia:**

In Cambodia approximately 60,000 children under 5 die each year ( 50% of deaths are associated with malnutrition)

The period from 6 to 23 months is a critical period for a child's physical and mental development. Losses in growth and development during this early period of life are irreversible in later life.

### **In Cambodia malnutrition in under five children**

- ▶ Stunting - ( 42.6% of under five children are stunted)
- ▶ Underweight – ( 28% )
- ▶ Wasting ( acute malnutrition ) 8.6% - CDHS 2005

Malnourished children have lowered resistance to infection; they are more likely to die from common childhood ailments like diarrhoeal diseases and respiratory infections; and for those who survive, frequent illness saps their nutritional status, locking them into a vicious cycle of recurring sickness, faltering growth and diminished learning ability.

# LIFE CYCLE OF UNDER- NUTRITION



- Undernourished mother
- Low birth weight baby
- Undernourished child
- Undernourished adult

# NOTES:

Slide 42 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# CAUSES OF MALNUTRITION

- Not exclusively breastfed until six months
- Not enough food/ amount of food at each meal
- Not fed frequently enough
- Not enough variation in foods
- Food is not rich enough in nutrients
- Illness

# NOTES:

**Slide 43** : MPA Module 10 Nutrition  
Facilitators slides and notes



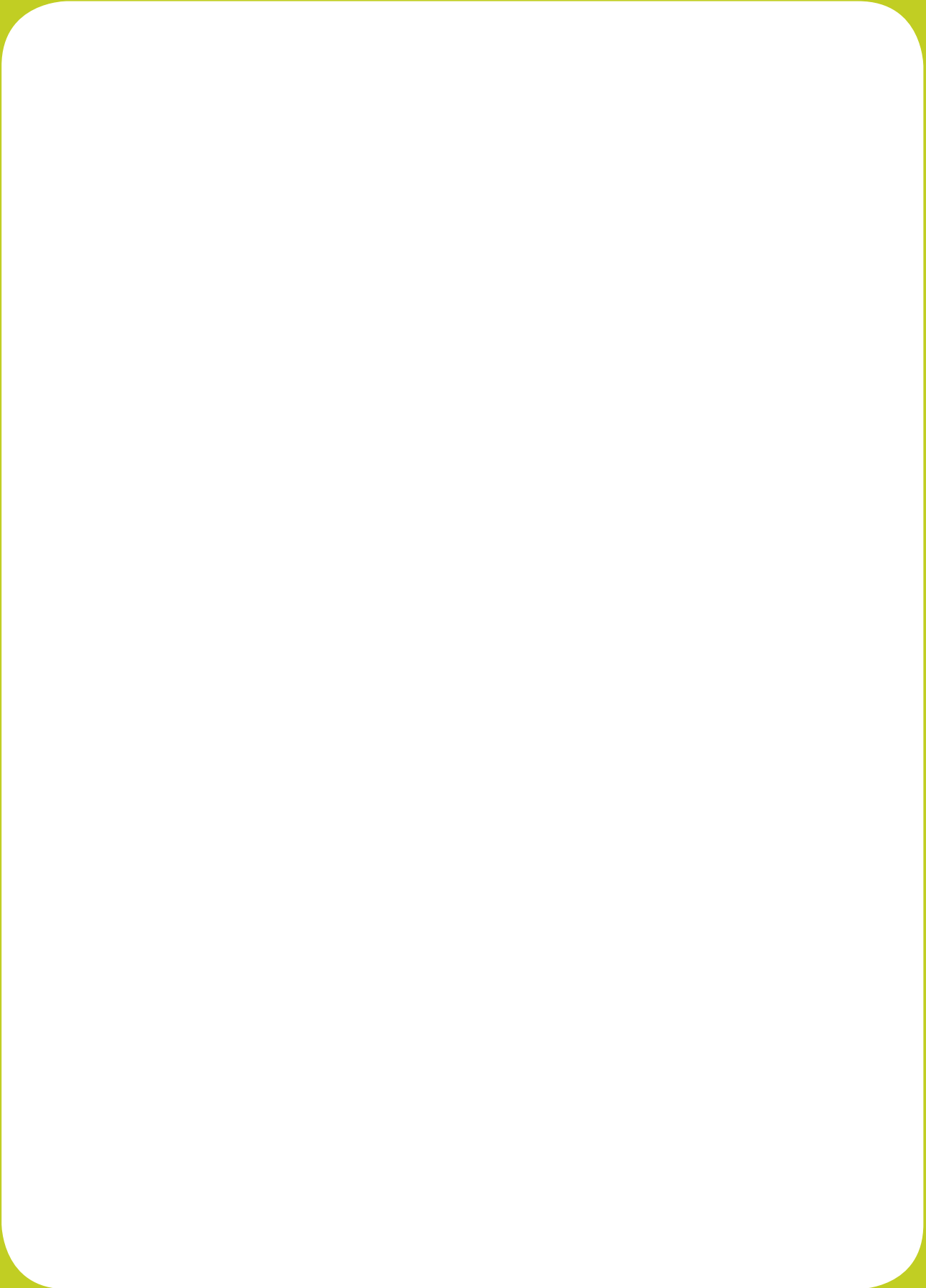
# WHAT IS INFLUENCING WHAT?

Illness ↔ malnutrition ↔ Illness



# NOTES:

**Slide 44 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# **SIGNS OF MALNUTRITION**

- Low weight for age- underweight
- Low height for age –stunting
- Low weight for height - wasting

**Often the care giver doesn't know that the child is malnourished**

# NOTES:

Slide 45 : MPA Module 10 Nutrition  
Facilitators slides and notes

Low weight for age (underweight) is a combination of chronic and acute malnutrition

Low height for age (stunting) is a sign of chronic malnutrition

Low weight for height (wasting) is a sign of acute malnutrition. Malnutrition that has happened in the recent past.

In children, chronic protein energy malnutrition has 2 common forms: **Marasmus** and **Kwashiorkor**.

The form of malnutrition depends on the balance of non protein and protein sources of energy.

# **SIGNS OF SEVERE MALNUTRITION: (KWASHIORKOR)**

- Swollen legs / feet
- No appetite
- Reddish pale thin hair
- Face like full moon
- Dry scaly skin hands / legs
- Child quiet and miserable
- Weight appears normal



# NOTES:

**Slide 46 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Kwashiorkor (also called the wet, swollen, or edematous form of protein energy malnutrition) is associated with premature abandonment of breastfeeding, which typically occurs when a younger sibling is born, displacing the older child from the breast.

So children with kwashiorkor tend to be older than those with marasmus. Kwashiorkor may also result from an acute illness, often gastroenteritis or another infection.

Kwashiorkor is less common than marasmus. In kwashiorkor, cell membranes leak, causing movement of intravascular fluid and protein into the tissues resulting in peripheral edema of the legs and hands.

# SIGNS OF SEVERE MALNUTRITION: WASTING (MARASMUS)

- Unhappy, worried face
- Good appetite (always hungry)
- Looks stressed
- Distended abdomen
- Thin with muscle wasting
- Low weight for age



**Marasmus** also called the **dry form of protein energy malnutrition** is one component of **protein-energy malnutrition** (PEM), the other being **kwashiorkor**.

Marasmus is a severe form of malnutrition caused by inadequate intake of protein and calories, and it usually occurs in the first year of life, resulting in **wasting** and growth retardation

**The major factors that cause marasmus are:**

- ▶ the transition from breastfeeding to nutrient-poor foods
- ▶ **acute** infections of the **gastrointestinal** tract
- ▶ **chronic** infections such as HIV or **tuberculosis**.

Marasmus causes weight loss and depletion of fat and muscle. In developing countries, Marasmus is the most common form of protein energy malnutrition in children.



# BREASTFEEDING

- Breast milk contains important nutrients
- The first milk is called colostrum
- All babies should be exclusively breast fed for the first six months
- Keeps the baby healthy
- When the baby starts complementary food at 6 months, breast milk should be continued until at least 2 years



# NOTES:

**Slide 48 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Breastmilk is the natural first food for babies, it provides all the energy and nutrients that the infant needs for the first months of life. It continues to provide up to half or more of a child's nutritional needs during the second half of the first year, and up to one-third during the second year of life.

Breastmilk promotes sensory and cognitive development, and protects the infant against infectious and chronic diseases.

# **IMPORTANCE OF EARLY INITIATION OF BREASTFEEDING**



- To provide the baby warmth from the mother (skin to skin contact)
- To stimulate bonding between mother and child
- To stimulate early milk production

# NOTES:

**Slide 49 : MPA Module 10 Nutrition**  
Facilitators slides and notes

**Early initiation of breast feeding** is putting the baby to the breast within one hour of delivery

**Skin to skin contact** is important to promote bonding of mother and baby and early breast feeding. Immediately after the birth the baby should be gently dried and put to the mothers chest. Both mother and baby should be covered with a warm cloth or blanket.



# IMPORTANCE OF COLOSTRUM

- To provide immunity to common infections  
To clean the child's gut of "meconium"
- To provide essential vitamins like vitamin A
- To help prevent allergies and food intolerance

# NOTES:

**Slide 50 : MPA Module 10 Nutrition**  
Facilitators slides and notes

**Colostrum** is the first milk. This special milk is yellow to orange in color and thick and sticky. It is low in fat, and high in carbohydrates, protein, and antibodies to help keep the baby healthy. Colostrum is extremely easy to digest, and is therefore the perfect first food for a baby.

When the baby is breastfed early and often, the breasts will begin producing mature milk around the third or fourth day after birth. The mother's milk will then increase in volume and will generally begin to appear thinner and whiter (more opaque) in color.

In the first few days it is extremely important to breastfeed the newborn at least 8-12 times each 24 hours, and more often is even better. This allows the baby to get all the benefits of the colostrum and also stimulates production of a plentiful supply of mature milk. Frequent breastfeeding also helps prevent engorgement.



# **IMPORTANCE OF EXCLUSIVE BREASTFEEDING**

- To provide the exact nutrients a baby needs
- To help the baby's development
- To help delay a new pregnancy
- To help protect the mothers' health (anemia, ovarian / breast cancer)

# NOTES:

**Slide 51 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Exclusive breastfeeding means that babies are given only breast milk and nothing else – no other milk, food, drinks and not even water.

Exclusive breastfeeding provides babies with the best start in life. It makes them smarter with higher intelligence and helps in optimal development.

Exclusive breastfeeding is extremely important to prevent infections like diarrhoea and acute respiratory infections in early infancy and thus reduce infant mortality.

Pre-lacteal feeds are any fluids besides breast milk, such as water, tea, fruit and juices. They are unnecessary and can interfere with breast feeding by causing the infant to feel full.

Pre-lacteal feeds can also cause health problems for the baby if the fluids given are not clean.

Breast milk provides all the water the baby needs in the first six months.

Exclusive breast feeding delays the onset of menstruation and provides protection against a new pregnancy within the first six months after delivery.



# **IMPORTANCE OF EXCLUSIVE BREASTFEEDING**

- Infant should be exclusively breastfed for the first 6 months
- Only breastfeeding
- No other foods, liquids or water!



# NOTES:

**Slide 52 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Exclusive breast feeding is giving the infant breast milk for the first six months. Exclusive breastfeeding for 6 months is the optimal way of feeding infants. Breast milk contains all the nutrients and fluid the infant needs for the first six months of life.

Exclusive breastfeeding reduces infant mortality due to common childhood illnesses such as diarrhoea or pneumonia, and helps a quicker recovery during illness

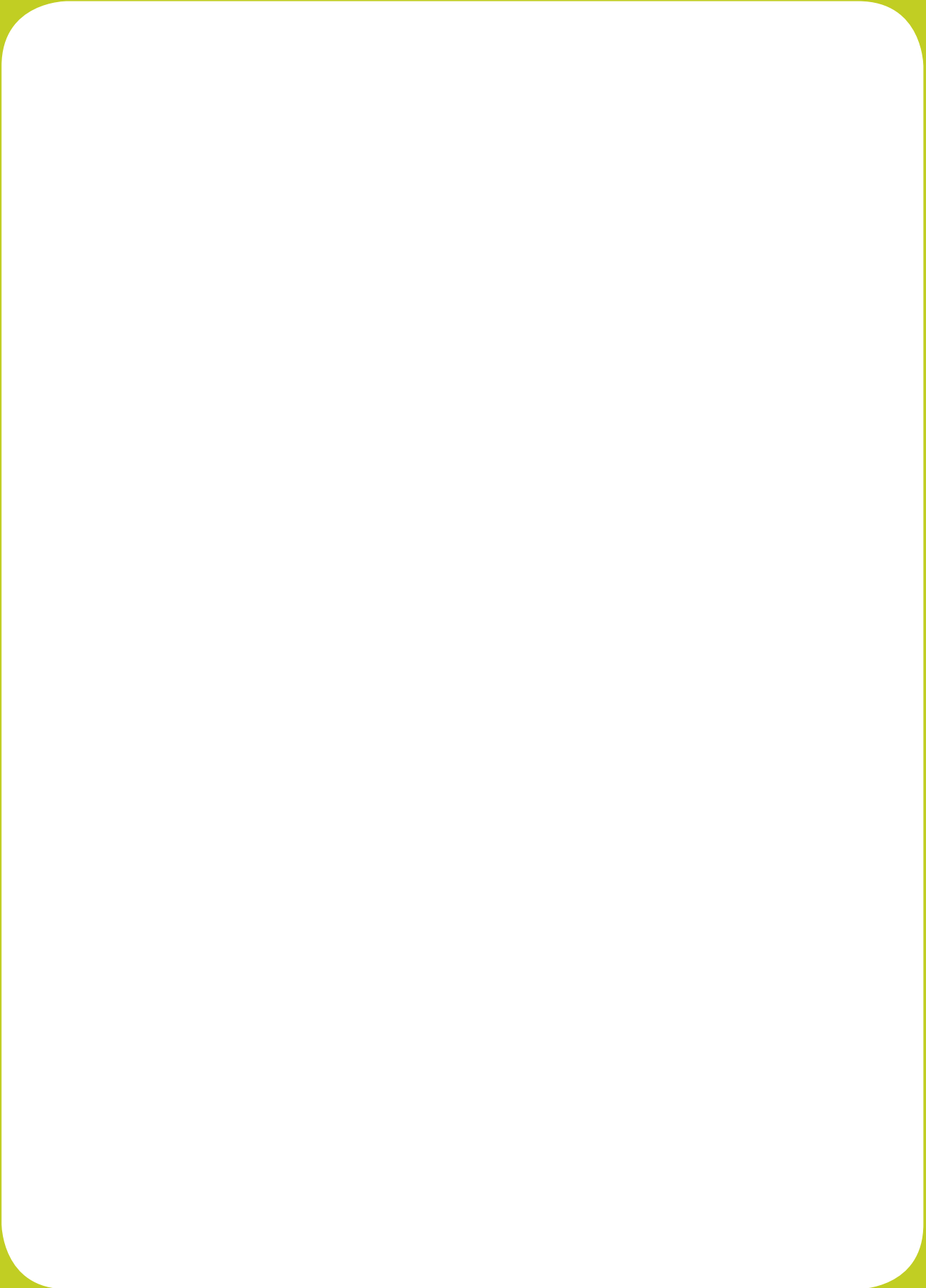
## **GOOD POSITIONING AND ATTACHMENT**



- Mother relaxed and comfortable
- Baby's body close
- Baby's head and body straight
- Baby's chin touching breast
- Baby's whole body supported

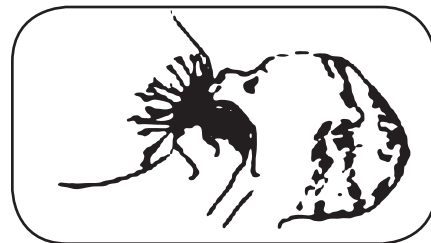
# NOTES:

Slide 53 : MPA Module 10 Nutrition  
Facilitators slides and notes



# GOOD POSITIONING & ATTACHMENT

- Baby's mouth wide open
- Baby's lower lip turned outwards
- Baby's tongue cupped around breast
- Baby's cheeks round
- More areola above baby's mouth
- Slow deep sucks, pauses
- Signs of swallowing



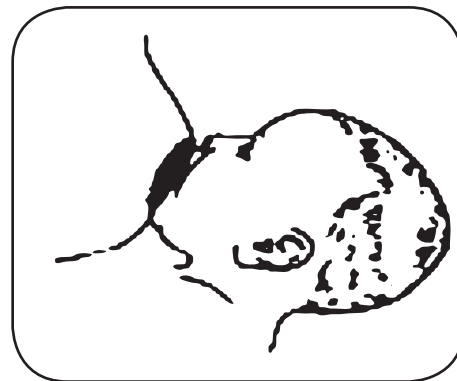
# NOTES:

Slide 54 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# POOR POSITIONING & ATTACHMENT

- Mother's shoulders tense, leans over baby
- Baby's body away from mother's body
- Baby's neck twisted
- Baby's chin not touching breast
- Only shoulder and head are supported



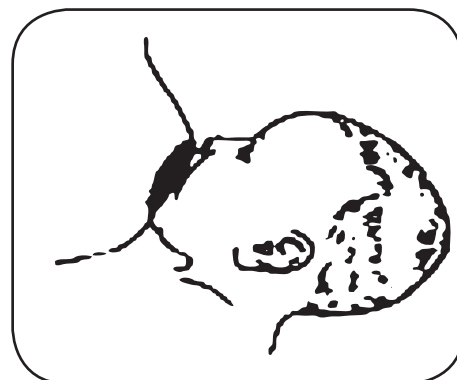
# NOTES:

**Slide 55 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# POOR POSITIONING & ATTACHMENT

- Baby's mouth not wide open
- Baby's lower lip turned in
- Baby's tongue not seen
- Baby's cheeks tense, pulled in
- More areola below baby's mouth
- Rapid sucks only
- Smacking or clicking sounds





# NOTES:

Slide 56 : MPA Module 10 Nutrition  
Facilitators slides and notes





# EXPRESSING BREAST MILK

## When mother and child not together

- Clean hands
- Clean cup
- Express milk
- Cover the cup
- Can keep up to 8 hours

# NOTES:

**Slide 57 : MPA Module 10 Nutrition**  
Facilitators slides and notes

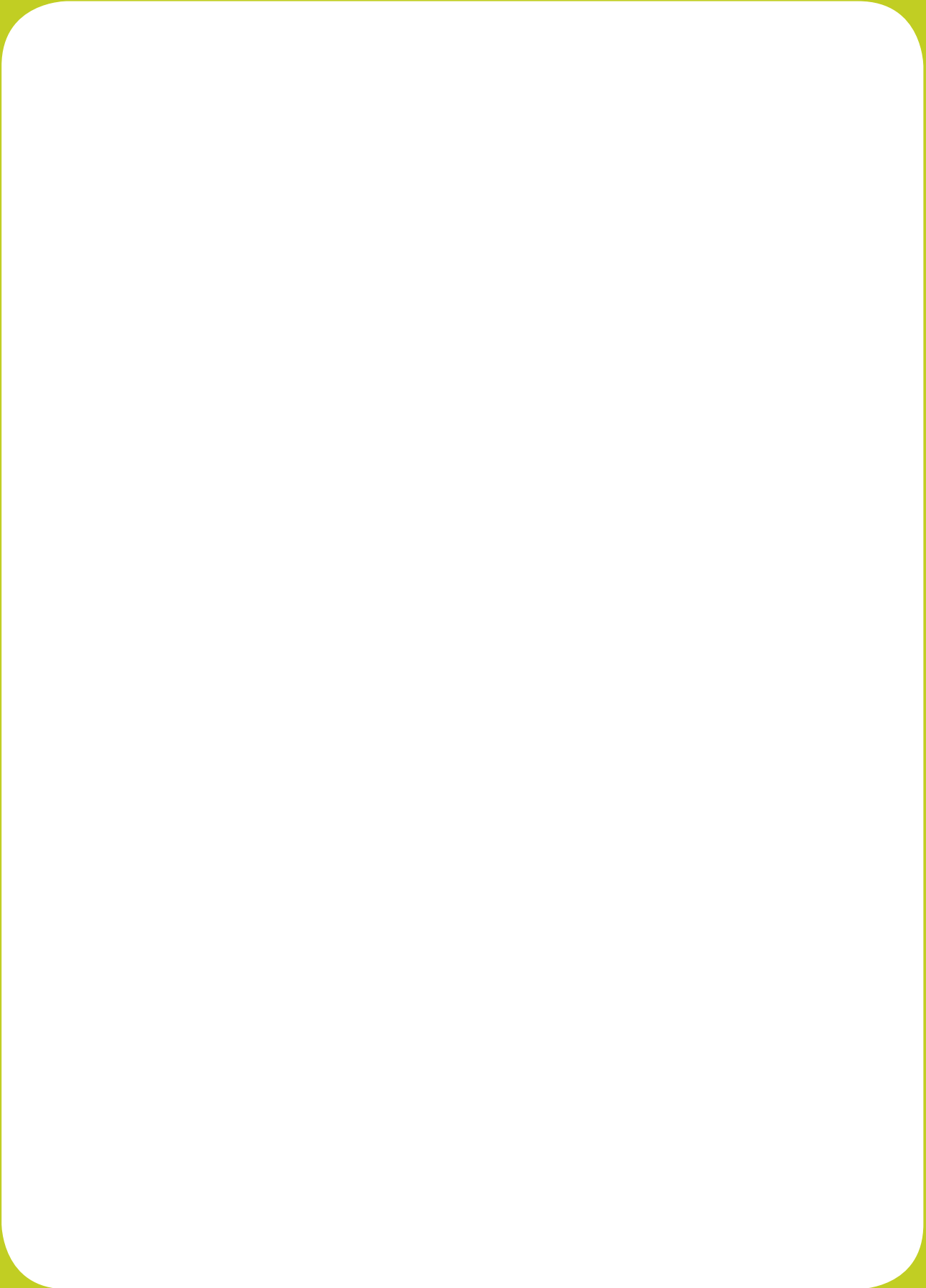


# COMMON BREASTFEEDING PROBLEMS

Experienced difficulties	Counselling messages
Insufficient milk	Feed baby every 2- 3 hours. Drink at least 2 litres of water per day. Eat an extra meal per day and extra nutritious snacks such as fruits
Engorgement	Apply clean warm cloth to breasts for 5 minutes before each breast feed. If baby difficult to attach to breast gently express some milk before feeding  Breastfeed every 2-3 hours, express remaining milk after feeds
Sore or cracked nipples	Keep clean and dry between feeds. Begin feeding on least sore breast. At the end of feed remove baby gently from the breast
Inverted nipple(s)	Use empty barrel of syringe to pull out the nipples before breastfeeding

# NOTES:

Slide 58 : MPA Module 10 Nutrition  
Facilitators slides and notes



# HIV + MOTHERS AND FEEDING OPTIONS

- Should receive counseling about feeding options from trained health care counselor ( PMTCT provider, trained health center or hospital midwives, pediatric AIDS care teams and trained NGO counselors).
- Depends on individual circumstances
- Exclusive breastfeeding is recommended for first 6 months, unless replacement feeding is acceptable, feasible, affordable, sustainable, safe (AFASS).
- Home based care teams, mother support groups or other community based care providers should provide follow up support to the mother at the community level.

## Counseling

**The feeding choice will depend on the woman's circumstances because:**

The most appropriate option depends on her individual circumstances including her health status and the local situation. But also on the specific counseling and support she is likely to receive.

The MoH recommends to give exclusive breastfeeding unless replacement feeding is:

### **AFASS:**

**1. Acceptable:** The mother perceives no social or cultural barrier to replacement feeding and is supported by family members and community

**2. Feasible:** The mother and family has adequate time, knowledge, skills and other resources to prepare the replacement food and feed the infant up to 12 times in 24 hours

**3. Affordable:** The mother and family can pay the cost of the replacement food and the equipment needed for preparation

**4. Sustainable:** There is an uninterrupted supply of the replacement feeding for at least 1 year or longer

**5. Safe:** Replacement foods are correctly and hygienically (clean equipment, clean hands) and nutritionally adequate

# GROWTH PROMOTION

- To promote normal weight gain and good physical and mental development of children
- Follow the recommendations from the IYCF counseling flipchart



## Growth promotion

Includes the delivery of an essential package of proven interventions that promote optimal growth and address the immediate causes of poor growth, including:

- ▶ Nutrition education, including IYCF counseling
- ▶ Vitamin A and other micronutrient supplementation
- ▶ Deworming every six months when the child reaches 1 year old
- ▶ Prevention and prompt treatment of illness (acute respiratory infection, diarrhea, malaria)

Important supportive interventions should include maternal nutrition, water and environmental sanitation (WES), treatment of severe malnutrition and fortified foods

In Cambodia after 6 months of age, few children receive adequate quality and quantity of complementary food, which is evidenced by the high levels of chronic malnutrition (stunting) poor growth and high levels of anemia among children under-five years, particularly from 6-23 months of age.

# PAGE FROM THE IYCF NUTRITION FLIPCHART

When an infant is 6 months old give complementary food. Add a variety of foods to thick rice porridge. Feed frequently according to the infants age and continue breast feeding

<b>6 months</b> 	 	 
<b>7 - 8 months</b> 	 	 
<b>9 - 11 months</b> 	 	 
<b>12 months and above</b> 	 	 

# NOTES:

## Complementary Feeding: ( consistency, frequency and amount of foods to offer in addition to continued breastfeeding)

Age	Texture	Frequency	Amount at each meal
6 month	Start with thick enriched Borbor, well mashed foods, e.g. mashed cooked banana, sweet potato, pumpkin, etc.	Start foods 2 times per day plus frequent breastfeeds at least 8 times per day	Start with 2-3 table-spoonfuls per feed
7-8 months	Thick enriched Borbor, well mashed foods,	Increasing to 3 times per day plus frequent breast feeds at least 8 times per day	Increasing gradually to 1/2 of Chan Chang Koeh at each meal
9-11 months	Thick enriched Borbor, finely chopped or mashed foods, and foods that baby can pick up	3 meals plus 1 snack between meals plus breast-feeds at least 6 times per day	Increasing gradually to 1 Chan Chang Koeh
12-24 months	Family foods, chopped or mashed if necessary, thick enriched Borbor	3 meals plus 2 snacks between meals plus breast-feeds as the child wants, at least 3 times per day	1 Chan Chang Koeh

***If baby is not breastfed, give in addition 1-2 extra meals per day.***



# ACTIVE FEEDING

- Model behavior
- Allow plenty of time to feed infant
- Encourage infant to eat a variety of foods
- Provide correct amounts for age
- Assist the infant to eat
- Provide finger foods

# NOTES:

**Slide 62 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Active feeding involves making feeding time fun, adopting a caring attitude and allowing plenty of time for feeding. Spend this time to talk and play with the infant to stimulate appetite and development.

Finger foods: When the child is old enough to hold food in his/her hands give snacks such as pieces of fruit ( banana/papaya) so that the child can enjoy eating by him/herself.

When a child is one to two years old they should be given food in a separate bowl and encouraged to eat on their own. Eating at the same time and place as other family members also helps improve appetite and avoids distractions.



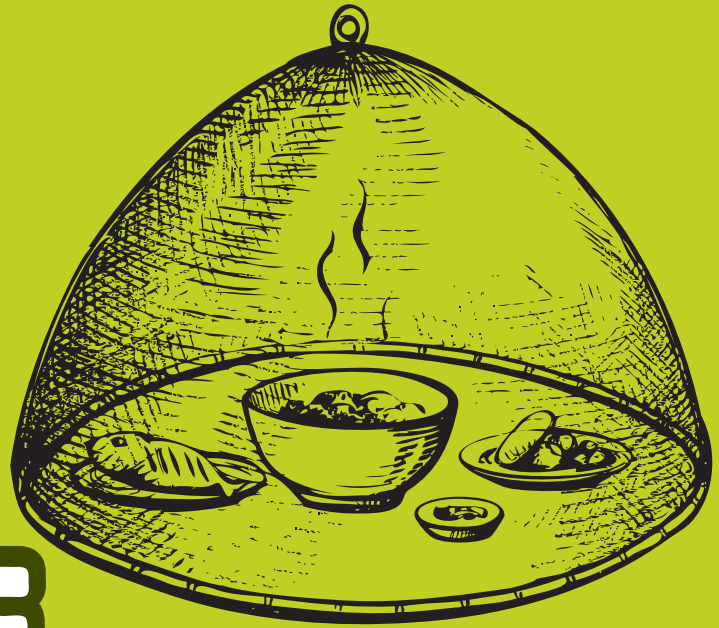
# HYGIENE

- Wash hands
- Use soap
- Utensil care
- Wash fruits and vegetables

# NOTES:

**Slide 63** : MPA Module 10 Nutrition  
Facilitators slides and notes

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# HYGIENE

- Boil drinking water
- Cook fish and meat well
- Provide freshly cooked foods
- Use net against flies
- If storing cooked foods:  
keep cooked foods cool  
reheat foods before re-using



# NOTES:

Slide 64 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# KEY MESSAGES FOR GROWTH PROMOTION

- Skin-to- skin contact at birth
- Early initiation of breastfeeding (within the first hour of delivery)
- No pre-lacteal feeding- not even water
- Exclusive breastfeeding until six months of age
- Continued breastfeeding >2 years

# NOTES:

Slide 65 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# **KEY MESSAGES FOR GROWTH PROMOTION CONTINUED**

- Give appropriate complementary feeding for child's age
- “Bobor Kroeung” (6-12 months)
- Family foods (> 1 year)
- Breastfeed sick children more frequently. If above 6 months old provide liquids and extra foods
- Low-birth weight newborns require more frequent feeding
- Don't use breast-milk substitute (formula)
- Counsel HIV+ mothers on infant feeding choices

# NOTES:

Slide 66 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# NOTES:

Slide 67 : MPA Module 10 Nutrition  
Facilitators slides and notes

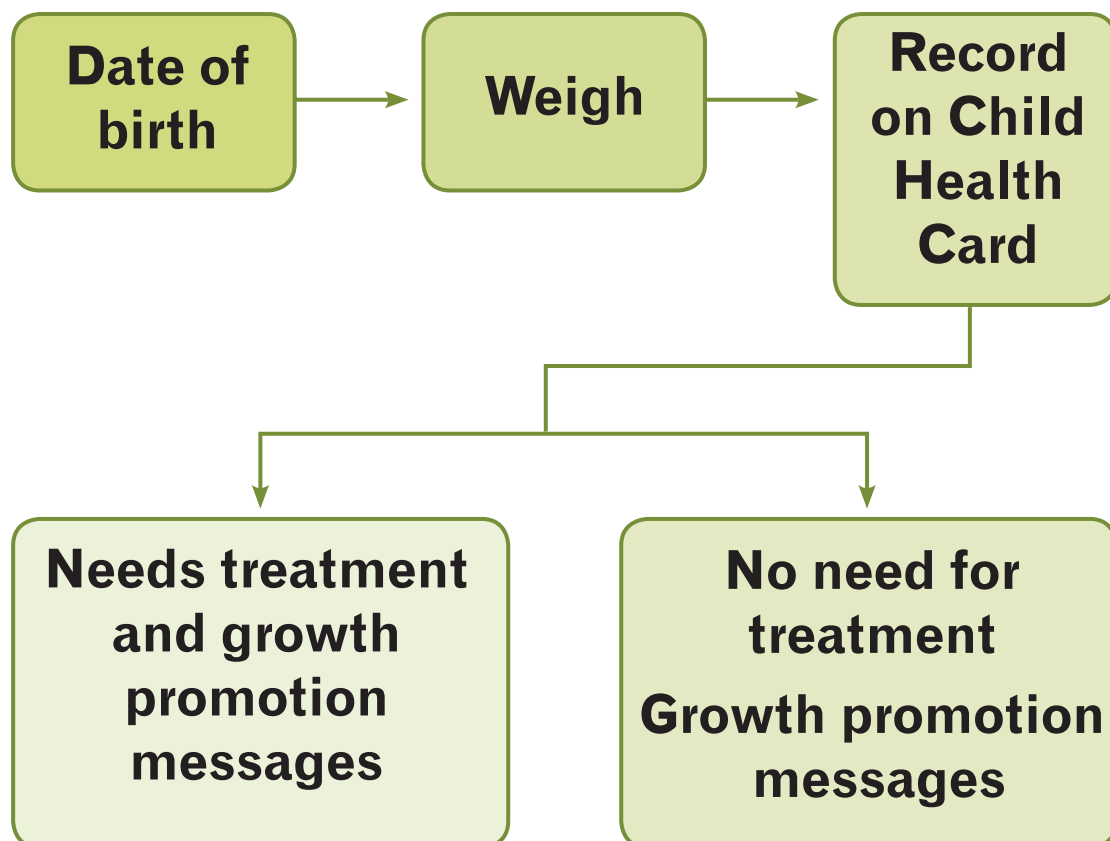
**Growth assessment** refers to a single measurement of a child's growth (normally weight-for-age) in comparison to the standard growth expected of a well-nourished child at the same age.

**Growth monitoring** refers to the regular and repeated assessment of a child's weight, in comparison to a growth standard, and in comparison to a recent and previous weight assessment for the same child.

In Cambodia, children's weight should be assessed at birth, and when attending a health facility such as at immunization visits (6, 10, 14 weeks and 9 months), at vitamin A distribution rounds, and at sick-child visits.

Follow-up and counseling should be provided to caregivers of any child whose weight is faltering and also to caregivers of children with a weight-for-age z-score of less than  $-2SD$  (as determined by plotting the weight for age on the Child Health Card).

# GROWTH ASSESSMENT CHART



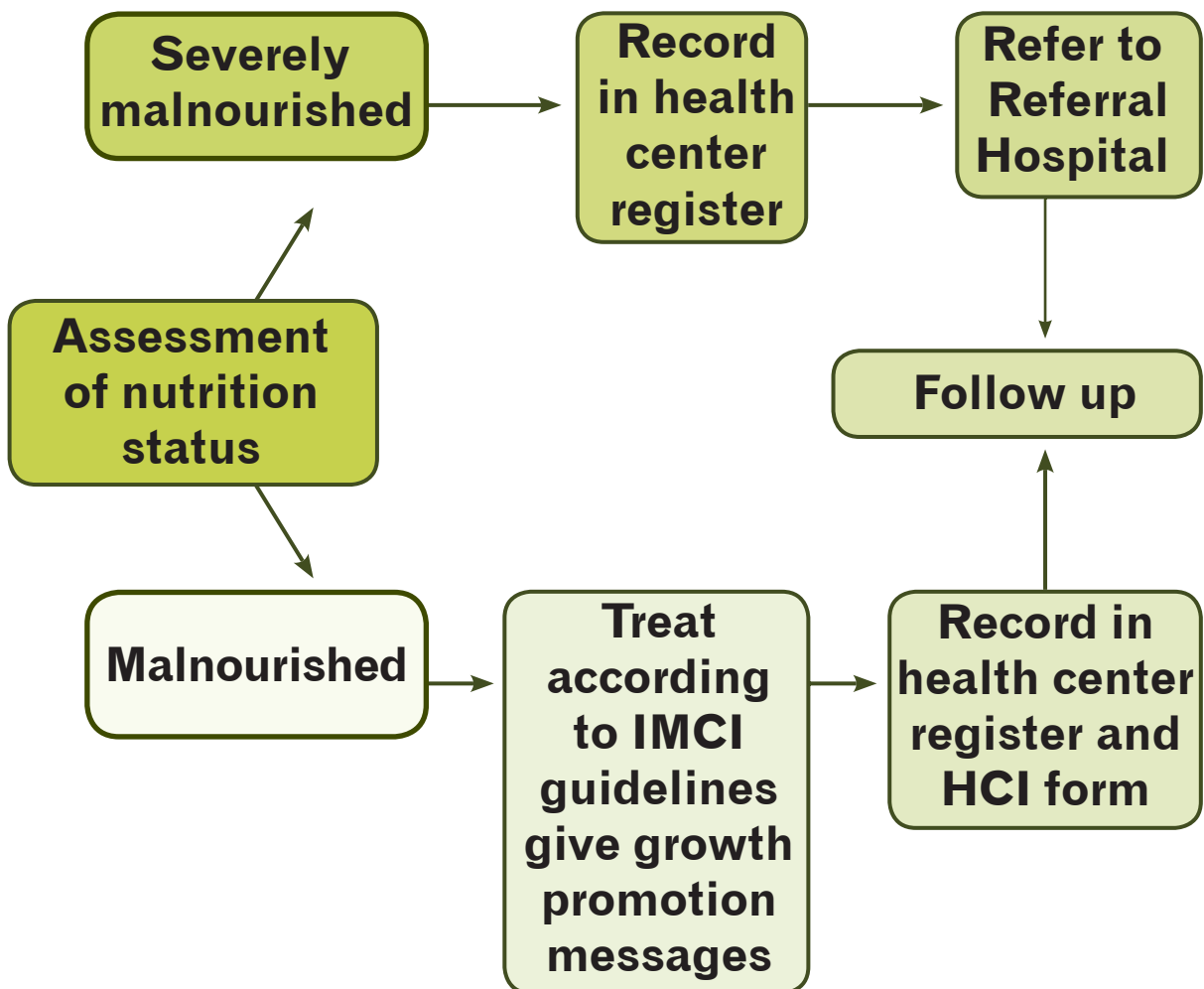


# NOTES:

Slide 68 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# TREATMENT TABLE

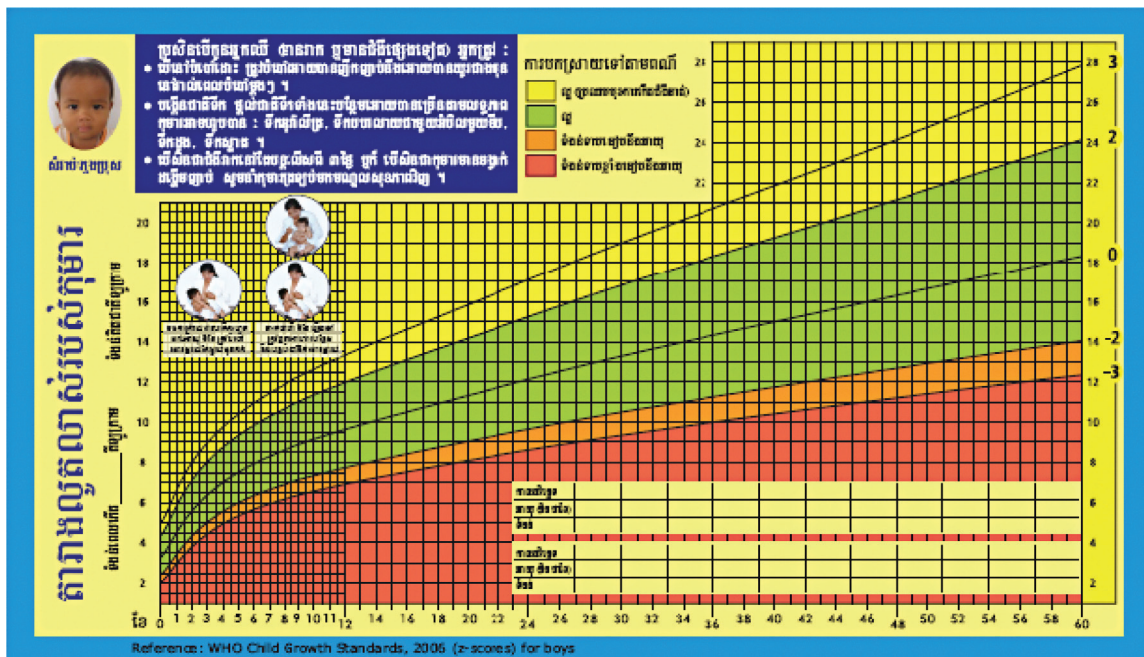


# NOTES:

Slide 69 : MPA Module 10 Nutrition  
Facilitators slides and notes



# EXAMPLE OF CHILD HEALTH CARD. GROWTH ASSESSMENT CHART NOT YET FINALIZED



# NOTES:

Slide 70 : MPA Module 10 Nutrition  
Facilitators slides and notes





# EXERCISE C PHALLA

- Questions
- Advice
- Support

# NOTES:

Slide 71 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# EXERCISE C

## - MONY

- Questions
- Advice
- Support



# NOTES:

Slide 72 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# **EXERCISE D: IS DARAVUTH GROWING?**

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# NOTES:

**Slide 73** : MPA Module 10 Nutrition  
Facilitators slides and notes

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# OBJECTIVES OF DAY 3

- To review the lessons learned from the IYCF session
- To train counselling skills for IYCF activities
- To provide knowledge on the vitamin A program
- To train vitamin A skills to participants

# NOTES:

Slide 74 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# **SKILLS OBJECTIVES OF DAY 3**

**At the end of the day, participants are able to:**

- 1.** Communicate IYCF messages to women and caregivers
- 2.** Identify vitamin A rich foods and promote their use to women and caregivers

# NOTES:

**Slide 75 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# SKILLS OBJECTIVES OF DAY 3

**At the end of the day, participants are able to:**

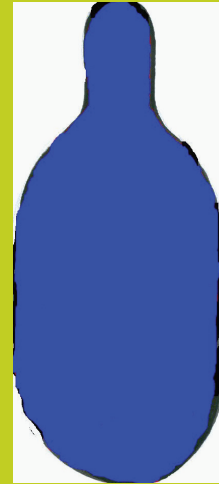
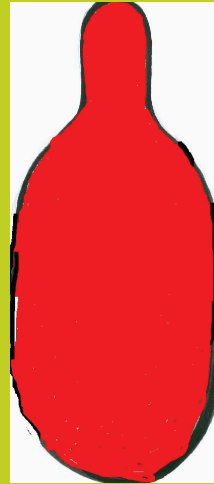
- 3.** Provide health education to mothers and caregivers about vitamin A supplementation
- 4.** Identify people at risk for vitamin A deficiency and identify people with signs of vitamin A deficiency and counsel appropriately



# NOTES:

Slide 76 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# WHAT IS VITAMIN A?

- Important micro-nutrient
- Found in various foods
- Vitamin A is fat soluble and can be stored in the body for up to six months
- Comes in capsules of 200,000 ( red capsule)  
100,000 (blue capsule)

Vitamin A is a nutrient required for the body to function properly. It is called a micronutrient because it is needed in extremely small amounts. Unlike many other micronutrients, vitamin A is fat-soluble and can be stored in the body for long periods of time.

Vitamin A is essential for growth and development. It contributes to the following processes: fetal development, the immune response, vision, taste, hearing, appetite, and growth.

Vitamin A plays a very important role in the immune system and hence is critical in helping the body resist infection and disease. Vitamin A also limits the severity of illnesses and hence reduces mortality.

**Dietary sources of Vitamin A** - Vitamin A is found in food in two forms:

- 1. Preformed vitamin A** (retinol) from foods of animal origin such as liver, milk products, fish, meat, and egg
- 2. Provitamin A carotenoids**, generally from plant foods, which can be biologically transformed into vitamin A. Globally about 60% of dietary vitamin A comes from provitamin (plant and animal sources).

Many factors influence the absorption and utilization of provitamin A, such as the amount, type, and physical form of the carotenoids in the diet; the intake of fat and fiber; protein, vitamin A, and zinc status; and the existence of certain diseases.

**Reference:** West, Keith.P. (2007) Public Health Implications of Vitamin A Deficiency and Prevention of Vitamin A Deficiency. Center for Human Nutrition, John Hopkin Bloomberg School of Public Health, Baltimore, Maryland.

# **VITAMIN A IS IMPORTANT**

**Because vitamin A saves children's lives by protecting them from infections**

## **Vitamin A:**

- Increases immunity against diseases
- Promotes growth
- Promotes brain development
- Promotes good vision

Deficiency of vitamin A is a leading cause of morbidity and mortality among preschool aged children and remains the leading cause of preventable childhood blindness in the world.

### **Important benefits of Vitamin A supplementation**

- ▶ Significant reduction in overall child mortality - **VITAMIN A SAVES CHILDRENS LIVES**
- ▶ Reduced severity of infectious illness, especially measles and chronic diarrhea with reduction in rates of hospital admissions and outpatient consultations
- ▶ Reduced prevalence of anemia
- ▶ Prevention of vitamin A deficiency blindness

***Improving the vitamin A status of deficient children aged 6 months to 5 years reduces the risk of mortality from measles by about 50%, from diarrhoea by about 40% and overall mortality by 25-35%. Vitamin A is thus as least as effective as immunization or oral rehydration in mortality prevention.***

Vitamin A deficiency also contributes to anaemia as Vitamin A deficiency impairs iron utilization. Children and pregnant women whose vitamin A status is improved through fortification or supplementation have been shown to experience increases in haemoglobin concentration.

**IMPORTANT – vitamin A deficiency can occur long before clinical signs such as night blindness become apparent**



# VITAMIN A DEFICIENCY

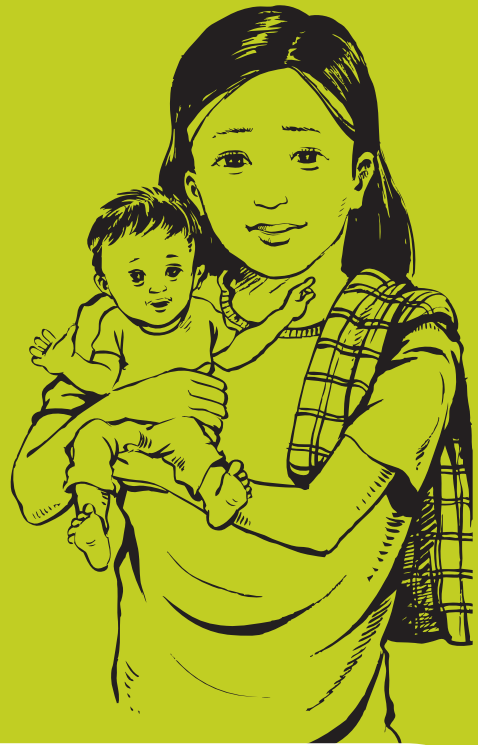
- Become sick more easily
- Increased risk of dying
- Reduced growth and development
- If severe: night blindness and serious eye disorder called Xerophthalmia

## Consequences of vitamin A deficiency

### Vitamin A deficiency (VAD):

- ▶ Reduces resistance to infections, leading to more severe and prolonged illnesses and therefore increasing the risk of death.
- ▶ Can cause eye damage, such as lesions, and when severe can cause blindness.
- ▶ Can also cause anemia.
- ▶ Generally, vitamin A deficiency can be present long before the first clinical sign of vitamin A deficiency, night blindness (impaired vision in dim light) is reported.

**IMPORTANT** –because vitamin A deficiency reduces the body's resistance to infection, vitamin A deficiency is a threat even before any direct signs become apparent.



# AT RISK GROUPS

- Infants 0-6 months especially if not breastfed
- All children 6 months – 59 months



# NOTES:

**Slide 80 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Children from 0 – 59 months are going through a period of rapid growth and development. If a mother is malnourished and has low stores of vitamin A her baby will receive an inadequate amount of vitamin A in breast milk and may become vitamin A deficient.

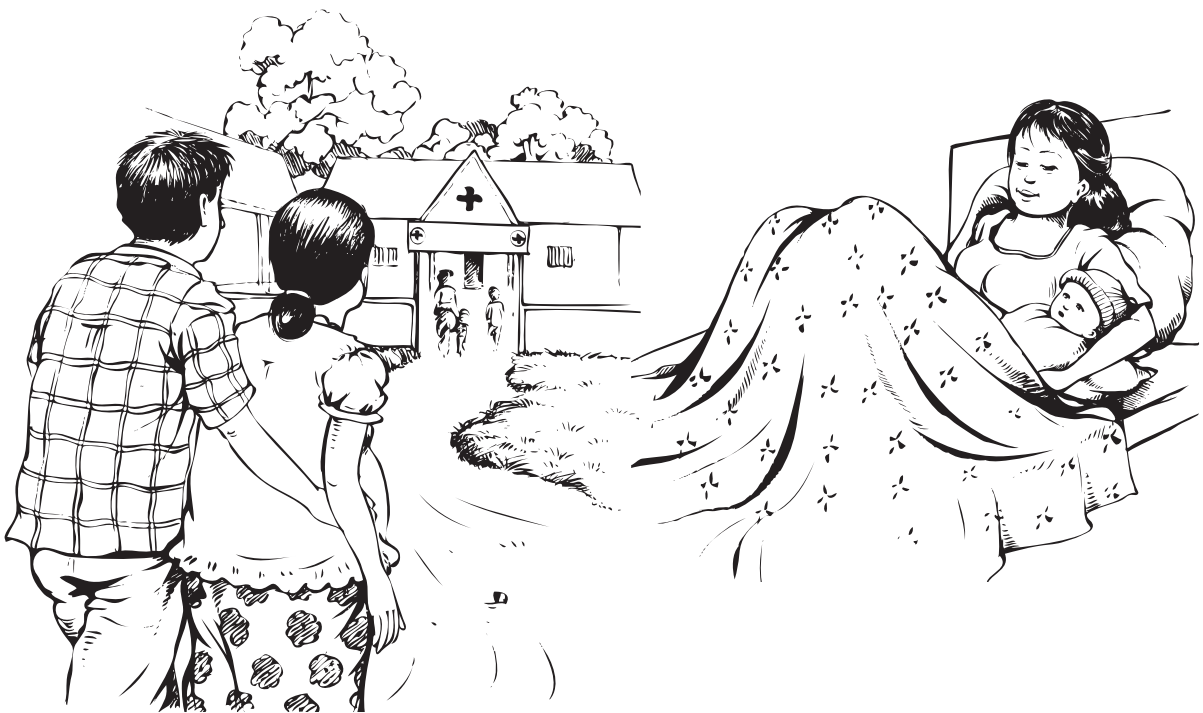
At six months all infants need additional nutrients than can be provided by breast milk. It is important to commence appropriate complementary feeding at 6 months. If the infant is reluctant to eat or the diet is not appropriate (variety of foods, the right consistency, amount and frequency) the infant is also at risk of vitamin A deficiency.

If complementary foods are not hygienically prepared the child is at risk of infection and may have reduced appetite. At 6 – 12 months the young infant starts crawling and putting things in his/her mouth which also increases the risk of infection.

In the first two years of life the children may have frequent childhood illness such as diarrhea and infections which affect their appetite and also their absorption of nutrients from the diet, putting them at risk for vitamin A deficiency.

# AT RISK GROUPS

- Post partum mothers
- Pregnant women



Vitamin A is needed in increased amounts to support pregnancy including fetal growth and development.

A post partum woman lactating woman requirements for vitamin A also rise in order to replace maternal vitamin A lost daily in breast milk, and to maintain breast milk vitamin A at a level to protect the needs of rapidly growing infants during at least the first 6 months of life.

If a woman is well nourished a healthy varied diet can meet her increased needs for vitamin A.

**However in areas of endemic vitamin A deficiency (VAD), such as Cambodia, vitamin A supplements must supply this need.** Women with poor nutritional status produce breast milk with levels of vitamin A that are too low to meet their infants' needs, and for infants to build liver stores of vitamin A for the future. Without adequate stores, infants are at greater risk of developing vitamin A deficiency and dying during their first few years of life.

Breast milk represents the single most important source of vitamin A for very young infants. All infants are naturally born with low body stores of vitamin A and depend upon vitamin A-rich colostrum and breast milk to meet their need for vitamin A and other nutrients needed for proper growth and development.

For well nourished women and infants, nearly 60 times as much vitamin A will be transferred from mother to infant during breast feeding as compared to pregnancy.

***The first cause of childhood vitamin A deficiency is maternal vitamin A deficiency***

**Reference:** Rice, A. L. ( 2007) Post Partum vitamin A Supplementation: Evaluating the Evidence for Action A2Z Micronutrient Project Technical Brief

# AT RISK GROUPS



## **Children with:**

- Persistent diarrhea
- Severe malnutrition
- Measles
- Night blindness
- Signs of xerophthalmia (night blindness, bitot spots or corneal lesions)

# NOTES:

**Slide 82 : MPA Module 10 Nutrition**  
Facilitators slides and notes

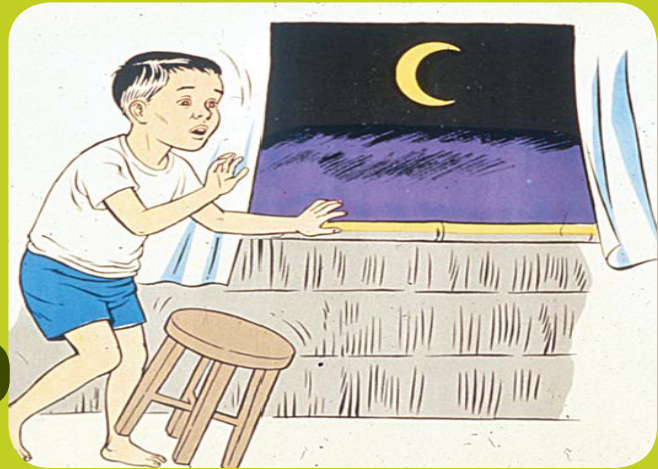
Illness worsens vitamin A status primarily by reducing intake due to anorexia and malabsorption and increasing utilization of vitamin A through greater catabolism and urinary loss.

Poor appetite is a major determinant of reduced dietary intake during episodes of childhood diarrhea and other infections

Diarrhea particularly seems to result in reduced intake of non-breast-milk foods; intake of breast milk is reduced to a lesser degree.

Malabsorption of vitamin A can occur during diarrheal illness and lower respiratory infections.

# CLINICAL SIGNS



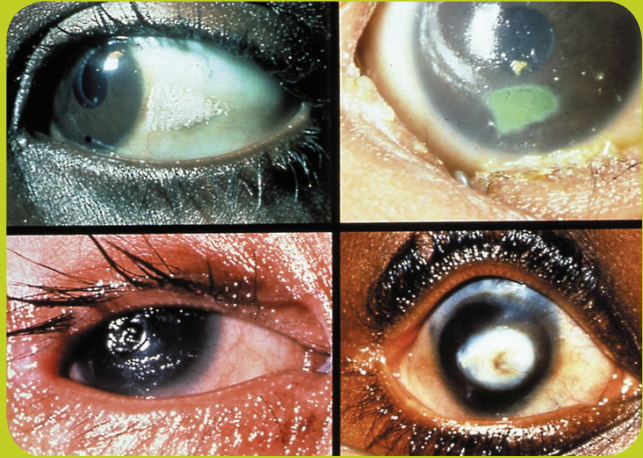
- Night blindness

# NOTES:

Slide 83 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# CLINICAL SIGNS



- Serious eye problems caused by vitamin A deficiency that need to be treated
- Will be explained in the next slides



# NOTES:

Slide 84 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# CLINICAL SIGNS

- Bitot's spots \_\_\_\_\_
- Note: vitamin A deficiency may be present long before Bitot spots appear



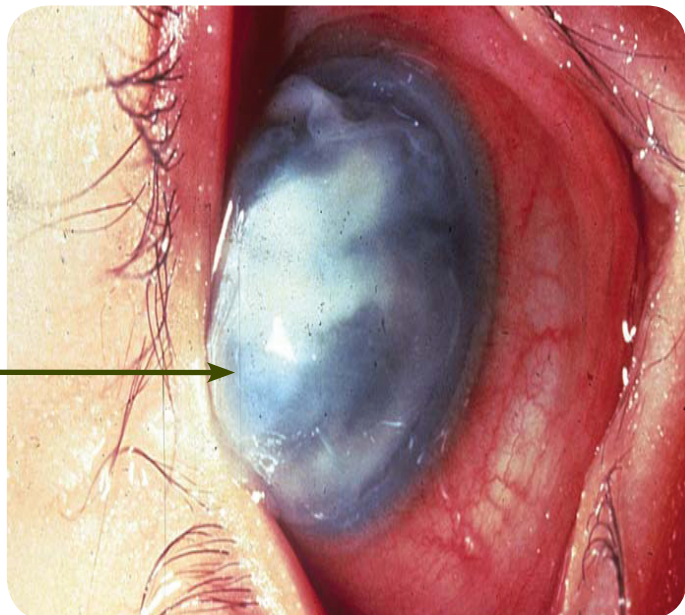
# NOTES:

Slide 85 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# CLINICAL SIGNS

- Corneal xerosis



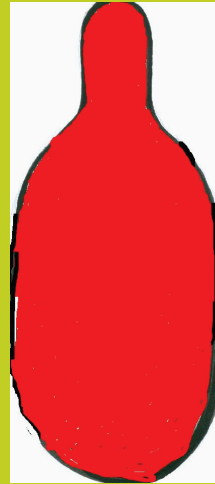
# NOTES:

**Slide 86 : MPA Module 10 Nutrition  
Facilitators slides and notes**

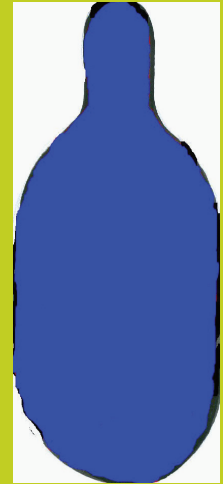
Corneal lesions are very serious and the patient should be referred immediately to a health facility that can provide specialized care for eye problems.

**There are currently 4 hospitals in Cambodia that can provide specialized eye treatment for serious eye conditions:**

- 1.** Takeo provincial hospital
- 2.** Phnom Penh -Angduong Hospital
- 3.** Siem Reap -Angkor Children's Hospital
- 4.** Kandal -Chey Chum Neas Referral Hospital



Vitamin A 200,000 IU



Vitamin A 100,000 IU

# VITAMIN A

## KEY MESSAGE

Vitamin A saves children's lives because it protects children from infections

## Key Activities

- Provide VAC to all children 6-59 months
- When administering vitamin A tell caregiver that their child is receiving vitamin A and that vitamin A saves lives
- Explain that every child 6 – 59 months needs vitamin A twice per year around May and November
- Record on Child Health Card
- Mebendazole every six months if child > 12 months

# NOTES:

Slide 87 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# VITAMIN A

## **KEY MESSAGE**

Vitamin A protects the health of a post partum woman and her newborn baby

## **Activities**

- Provide VAC ( 200,000 units) with:
- Iron/Folate ( 42 tablets)
- 1 dose (=500 mgs) Mebendazole to all post partum mothers
- Within 6 weeks of delivery



# NOTES:

**Slide 88 : MPA Module 10 Nutrition**  
Facilitators slides and notes

All post partum women should receive vitamin A, Iron/folate and Mebendazole within the first six weeks of delivery as part of a comprehensive post partum care service

Giving vitamin A to mothers immediately after birth increases the amount of vitamin A in breast milk and therefore increases the infant's intake of vitamin A. It also improves the mother's own stores of vitamin A and utilization of iron stores.

Exclusive breast-feeding. A child should be exclusively breast-fed for six months, without addition of other foods or fluids. Consumption of colostrum should be promoted. Exclusive breast-feeding helps prevent illnesses which deplete vitamin A stores.

# VITAMIN A = MESSAGES

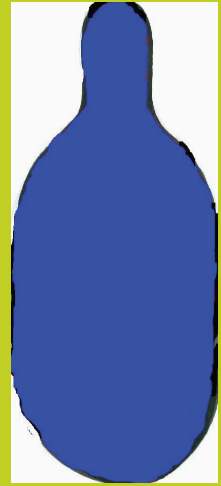
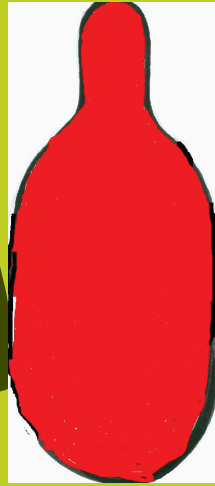
- Following the national guidelines provide VAC to all children with:
  - ▶ persistent diarrhea
  - ▶ severe malnutrition
  - ▶ measles
  - ▶ xerophthalmia (nightblindness or bitot spots or corneal lesions)

And all adults with Xerophthalmia

## Vitamin A and Anemia Treatment Table for Children

Symptoms Illness	Age / group	Dose
Persistent diarrhoea / Severe malnutrition	0- 5 months	Vitamin A 50,000 IU : (1 dose)
	6-11 months	Vitamin A 100,000 IU : (1 dose)
	1 – 12 years	Vitamin A 200,000 IU : (1 dose)
Vitamin A Deficiency Signs: <ul style="list-style-type: none"> <li>• Night blindness</li> <li>• Conjunctival xerosis</li> <li>• Bitot's spot</li> </ul>	0- 5 months	Vitamin A 1 <sup>st</sup> day 1 dose 50,000 IU Vitamin A 2 <sup>nd</sup> day 1 dose 50,000 IU Vitamin A 14 <sup>th</sup> day 1 dose 50,000 IU
	6-11 months	Vitamin A 1 <sup>st</sup> day 1 dose 100,000 IU Vitamin A 2 <sup>nd</sup> day 1 dose 100,000 IU Vitamin A 14 <sup>th</sup> day 1 dose 100,000 IU
	1 – 12 years	Vitamin A 1 <sup>st</sup> day 1 dose 200,000 IU Vitamin A 2 <sup>nd</sup> day 1 dose 200,000 IU Vitamin A 14 <sup>th</sup> day 1 dose 200,000 IU
Anemia Severe palmar pallor	All ages	Do not give Iron, refer urgently to hospital.
Some palmar pallor	4- 12 months ( 6 - < 10kgs)	Iron folate tablet ¼ dose a day for 14 days. Reassess after treatment ( 1 tablet contains 60mgs of iron and 400ug of folic acid)
	1–5 years (10 - 19 kg)	Iron folate tablet ½ dose a day for 14 days. Reassess after treatment

# VITAMIN A CAPSULES



- 100,000 IU
- 200,000 IU
- 50,000 IU = 1/2 of 100,000 IU

# NOTES:

Slide 90 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# PREVENTION OF VITAMIN A

Pregnant women	Key counselling messages
<b>Post partum women</b>	Consume vitamin A rich foods daily. Home gardening Provide 1 VAC 200,000 IU within 6 weeks of delivery
<b>Infants 0 - 6 months</b>	Provide colostrum within the first hour of delivery Provide exclusive breast feeding for the first 6 months
<b>Infants 6 – 59 months</b>	Continue breastfeeding until at least 2 years of age and beyond Start appropriate complementary feeding at 6 months Provide VAC every six months to children 6-59 months around May and November Provide mebendazole every six months from 12 - 59 months Send children to health center for treatment if signs of vitamin A Deficiency

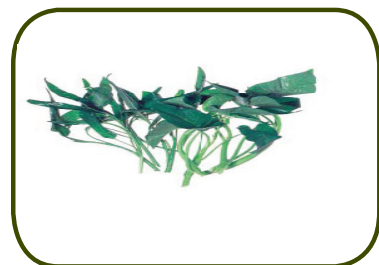
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Slide 91 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# EAT VITAMIN A RICH FOODS DAILY

- Egg yolk
- Fish, chicken
- Liver
- Tofu
- Dark green leafy vegetables
- Orange and yellow vegetables and fruits
- Breast milk for infants and young children





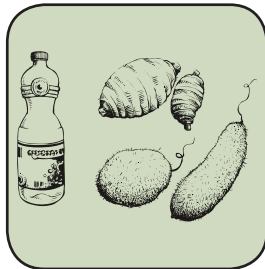
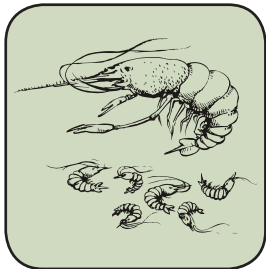
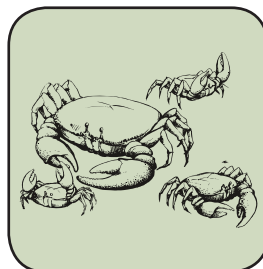
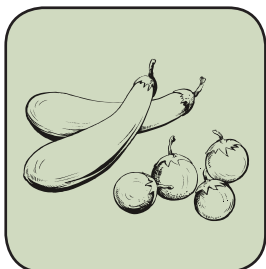
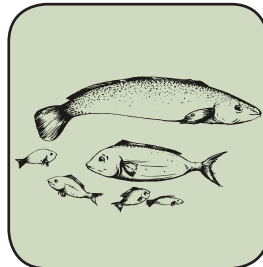
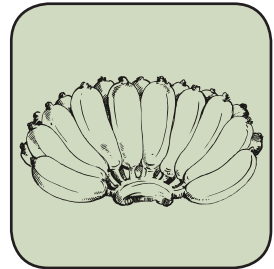
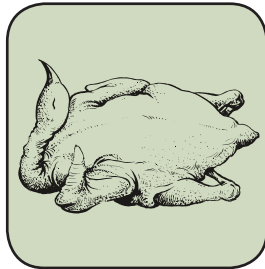
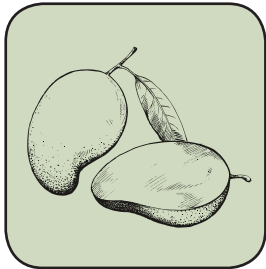
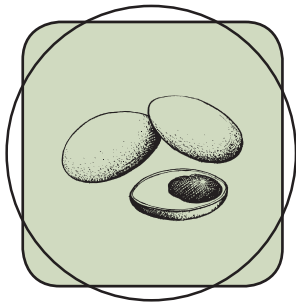
# NOTES:

Slide 92 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# EXERCISE E

## Vitamin A Rich Foods



# NOTES:

**Slide 93** : MPA Module 10 Nutrition  
Facilitators slides and notes

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**Treatment of xerophthalmia  
(night blindness and active corneal lesions)**

<b>All age groups except women of reproductive age (&gt;12years)</b>		
Infant <6 months of age	Immediately:	50,000 IU*
	Next day:	50,000 IU*
	At least 2 weeks later:	50,000 IU*
Children 6-11 months	Immediately:	100,000 IU
	Next day:	100,000 IU
	At least 2 weeks later:	100,000 IU
Individuals 12 months and older	Immediately:	200,000 IU
	Next day:	200,000 IU
	At least 2 weeks later:	200,000 IU
Note: *Give half of the 100,000 IU		

<b>Women of reproductive age (&gt;12years)</b>		
With night-blindness or Bitot's spots	Daily for 30 days	10,000 IU**
With severe signs of active xerophthalmia ( acute corneal lesion), whether or not pregnant	Immediately:	200,000 IU
	Next day:	200,000 IU
	At least 2 weeks later:	200,000 IU
Note:** 10,000 IU not yet available in Cambodia		

→ Individuals with acute corneal lesions must be referred to a specialized unit as an emergency.

# NOTES:

**Slide 94 : MPA Module 10 Nutrition  
Facilitators slides and notes**

Individuals with acute corneal lesions must be referred to a specialized eye unit as an emergency as an emergency.

Currently there are 4 specialized eye facilities that are able to treat corneal lesions:

- 1.** Takeo provincial hospital
- 2.** Phnom Penh -Angduong Hospital
- 3.** Siem Reap -Angkor Children's Hospital
- 4.** Kandal -Chey Chum Neas Referral Hospital

# TREATMENT OF MEASLES, PERSISTENT DIARRHEA AND SEVERE MALNUTRITION

Treatment of measles		
Give a vitamin A capsule treatment to all children with active measles or with measles within the past three months.	Children 6-11 months:	100,000 IU on Day 1 100,000 IU on Day 2
	Children 1- 12 years:	200,000 IU on Day 1 200,000 IU on Day 2

Treatment of persistent diarrhea (< 14 days ) and severe malnutrition		
Give a vitamin A capsule to all children with persistent diarrhea or severe malnutrition	Children 6-11 months:	100,000 IU
	Children 1- 12 years:	200,000 IU

# NOTES:

Slide 95 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# KEY BENEFITS OF VITAMIN A

- Significant reduction in overall child mortality - **VITAMIN A SAVES CHILDRENS LIVES BY PROTECTING THEM FROM INFECTIONS**
- Reduced severity of infectious illness, especially measles and chronic diarrhea with reduction in rates of hospital admissions and outpatient consultations
- Reduced prevalence of anemia
- Prevention of vitamin A deficiency blindness




# NOTES:

Slide 96 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# VITAMIN A JOB AID

**VITAMIN A  
DISTRIBUTION ROUND**



**VITAMIN A SAVES  
CHILDREN'S LIVES**





**BE FRIENDLY  
SMILE  
LISTEN**

**01**

**Ask for Child Health Card  
Check information on Child Health Card**

**02**




**Provide children aged 6 months – 59 months with  
VAC and mebendazole according to the table below**

Target group	Dose VAC	Mebendazole
Children 6-11 months	100,000 IU 	*NO mebendazole*
Children 12-59 months	200,000 IU 	12-23 months 1/2 tablet (=250 mg) of Mebendazole 
		24-59 months 1 tablet (=500 mg) of Mebendazole 

*As you give the vitamin A to each child, explain to the caretaker that you are giving vitamin A and that Vitamin A Saves Children's Lives*

**03**

**Provide post partum women with Vitamin A,  
Mebendazole and iron folate tablets within the  
first 6 weeks after delivery**

Vitamin A 	Mebendazole 	Iron folate tablets 
1 VAC (200,000 IU) to PPM within 6 weeks after delivery Visit HC if Vitamin A deficiency signs occur	Mebendazole 1 dose (500mg)	42 tablets if she did not receive at delivery. Take 1 tablet a day. Explain side effects: black stools, discomfort, nausea, diarrhoea or constipation. Explain that these side effects are not dangerous, advise to take the tablets with meals or at bedtime. Advise about iron rich foods. <small>(1 tablet of mebendazole contains 40 mg iron and 400 µg folic acid)</small>

*Record on mother's card, tally sheet and HC record book when post partum women receives Vitamin A, Mebendazole and iron folate tablets.*

# NOTES:

Slide 97 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# VITAMIN A JOB AID

04

## Counsel on Vitamin A rich food



### Advise the mother:

- All the family should eat foods rich in Vitamin A
- **VITAMIN A SAVES CHILDREN'S LIVES BECAUSE IT PROTECTS CHILDREN FROM COMMON CHILDHOOD ILLNESSES**
- Vitamin A reduces the severity of infectious illness, especially measles and chronic diarrhea.

### Vitamin A Rich Foods

- Eggs, fish, meats, and liver
- Orange/yellow colored vegetables and fruit: e.g. pumpkins, carrots, yellow/orange fleshed sweet potatoes, ripe papaya (papaw), and ripe mango
- Dark green leafy vegetables: e.g., spinach, cassava leaves, bean leaves, and pumpkin leaves



### Key Messages: VITAMIN A SAVES CHILDREN'S LIVES

Women	Infants 0 - 6 months	Infants 6-59 months
Eat Vitamin A rich foods and increase homestead food production 1 VAC (200,000 IU) to PPM within 6 wks after delivery Visit HC if Vitamin A deficiency signs occur	Immediate breast feeding within first hour of delivery Exclusive breast feeding up to 6 months Visit HC or outreach for immunizations and health care	Continue breast feeding for at least 2 years Appropriate complementary feeding from 6 months VAC + mebendazole every 6 months Visit HC if signs of Vitamin A deficiency occur or when sick

05

## Counsel on Breastfeeding and Complementary Feeding



Start complementary feeding from 6 months of age.  
Continue breastfeeding until the child is at least 2 years old and beyond



Follow the recommendations for complementary feeding on the next sheet of the job Aid. Make sure foods from all food groups are included in the diet.

06

Fill out Child Health Card – Remind the caregiver of next Vitamin A supplementation round (around May and November of each year).  
Remind mother to bring Child Health Card to each health care visit.  
Fill out HC record book/ tally sheet if at village level



# NOTES:

Slide 98 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# VITAMIN A JOB AID COMPLEMENTARY FEEDING GUIDELINES

**When an infant is 6 months old give complementary food. Add a variety of foods to thick rice porridge. Feed frequently according to the infants age and continue breast feeding**

<p><b>6 months</b></p>	
<p><b>7 - 8 months</b></p>	
<p><b>9 -11 months</b></p>	
<p><b>12 months and above</b></p>	

# NOTES:

Slide 99 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# EXERCISE

## - PIDOR

- Questions
- Advice
- Support



# NOTES:

**Slide 100 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# EXERCISE- MOLY

- Questions
- Advice
- Support

# NOTES:

**Slide 101 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# EXERCISE- SOTHEA

- Questions
- Advice
- Support

# NOTES:

Slide 102 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# EXERCISE- REAKSAA



- Questions
- Advice
- Support

# NOTES:

**Slide 103 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# OBJECTIVES OF DAY 4

- To repeat the lessons learned from vitamin A session
- To train on planning skills for vitamin A activities
- To provide knowledge about the iron program
- To practice skills for anaemia prevention and control



# NOTES:

**Slide 104 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# **SKILLS OBJECTIVES OF DAY 4**

**At the end of the day, participants are able to:**

- 1.** Fill in the tally sheets for vitamin A distribution
- 2.** Organize vitamin A distribution rounds
- 3.** Identify iron rich foods and promote their use to women and caregivers

# NOTES:

**Slide 105 : MPA Module 10 Nutrition**  
Facilitators slides and notes

# SKILLS OBJECTIVES OF DAY 4

**At the end of the day, participants are able to:**

4. Identify people at risk for iron deficiency and people with signs of iron deficiency and counsel them appropriately

# NOTES:

**Slide 106 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# THE OUTREACH TALLY SHEET

## Is used for:

- Calculating the vitamin A, Mebendazole and Iron/Folate stocks required for each village during outreach sessions
- (VAC and Mebendazole twice a year during VAC distribution activities; Iron/Folate every month to pregnant and post partum women)
- Tallying the doses distributed during the outreach session

# NOTES:

**Slide 107 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# TALLY SHEET FOR OUTREACH SESSIONS

Tally sheet for recording provision of medicine during community outreach sessions

Name of Village	Vitamin A Supplement			Deworming Medicine			Pregnant Women
	Children 6 – 11 months ( 100,000 IU)	Children 12 – 59 months ( 200,000 IU)	Post partum women ( < 6 weeks)	Children 12 – 23 months 250mgs	Children 24- 59 months 500mgs	Post partum women (< 6 weeks)	
-----	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Note: Please put the estimated number for each target group in the small boxes before the distribution round



# NOTES:

**Slide 108 : MPA Module 10 Nutrition**  
Facilitators slides and notes

The tally sheet is a specially designed table to be used by health staff during outreach sessions in communities

The table consists of a number of columns. The first column is for the name of the village and the total population of the village

The other columns give the target groups and the doses of vitamin A and Mebendazole for the specific target groups

In each column for each target groups there is a small box to insert the estimated number of each target group that will require vitamin A or Mebendazole

Estimates should be made before conducting the outreach session. This will help the health staff estimate how much vitamin A and Mebendazole will be needed in each village

# CALCULATE THE ESTIMATED DOSES NEEDED

- Use the national estimated percentages of the population for births, postpartum women (first 6 weeks after delivery) children of age groups 0-1 years and 0-5 years.
- Using the national estimates for each target group calculate the number of each target group for each village.

# NOTES:

Examples of how to estimate target group numbers for vitamin A and Mebendazole

The numbers printed in bold are an example from Kandal Province in 2007/2008

- 1.** Find the percentages for births, postpartum women (< 6 weeks after delivery) children of age groups 0-1 years and 0-5 years. Children 0-1 year = 2.4%. Children 0-5 years = 11.1%. Postpartum women < 6 weeks = 2.6%.
- 2.** Calculate the percentage of children 6-11 months (for VAC 100,000 IU)  
Children 0-1 year 2.4%  
6-11 months is  $\frac{1}{2}$ , so  $2.4\% / 2 = 1.2\%$
- 3.** Calculate the percentage of children 12-59 months (for VAC 200,000 IU)  
Children 0-5 years 11.1%  
12-59 months – 0-11 m  $11.1\% - 2.4\% = 8.7\%$ .
- 4.** Calculate the estimated number of children 6-11 months in a village  
M/F (total population in the village) \* 1.2 / 100  
M/F (total population in the village) \* 0.012 = ... ?
- 5.** Calculate the estimated number of children 12 -59 months in a village  
M/F (total population in the village) \* 8.7 / 100  
M/F (total population in the village) \* 0.087 = ... ?
- 6.** Calculate the estimated number of postpartum women <6 weeks in a village  
M/F (total population in the village) \* 2.6 / 100  
M/F (total population in the village) \* 0.026 = ... (per 1 year)

# CALCULATE THE ESTIMATED DOSES NEEDED

- Record the outcomes in the small box in the upper right corner of the appropriate target group for each village
- Add all the estimated doses distributed. Put the total in the total column on the back page of the tally sheet
- Order enough stocks from the district or the next distribution round (or per month)

# NOTES:

Slide 110 : MPA Module 10 Nutrition  
Facilitators slides and notes

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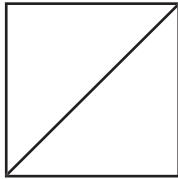
# CALCULATE STOCK DISTRIBUTED

- Tally each dose handed out in the appropriate big box per target group per village
- After all eligible children and women who attended outreach received their dose calculate the difference between the estimated doses and the doses handed out
- Were any children or women missing?
- Why? What can you do to reach the missing children and women to distribute the dose to them?

# NOTES:

Slide 111 : MPA Module 10 Nutrition  
Facilitators slides and notes

Use the big boxes to tally the doses handed out, completing a box (4 forming a box, 1 diagonal through that box) adding 1 stripe for each dose handed out. One box like this represents 5 doses handed out.



# EXERCISE G - PLANNING VITAMIN A DISTRIBUTION ROUND

	Activity	Step number #
<b>A</b>	Check vitamin A capsule stock. Is it in good condition, when is the expiry date? Order stock as necessary from the OD	
<b>B</b>	Make estimate on the tally sheet of each village pop and target group of mothers and children for each village	
<b>C</b>	Plan an agenda for a meeting with village volunteers to discuss the planning for the vitamin A supplementation round in each of the villages	
<b>D</b>	Conduct a refresher session during the monthly meeting for village volunteers, about vitamin A supplementation and discuss their role	
<b>E</b>	Check the village volunteer register and estimate how many of the eligible children and post partum women have received the vitamin A supplement and how many children and post partum women need to be followed up and given the vitamin A supplement	
<b>F</b>	Estimate the number of children that need to be followed up and provide vitamin a supplement and recording sheet to the village volunteer	
<b>G</b>	Check the tally sheets are complete before leaving the village	
<b>H</b>	Complete the HCI form with the results from the Vitamin A supplementation round	
<b>I</b>	Estimate how many vitamin A capsules you will need by calculating how many children aged 6- 59 months and how many newly delivered women are living in your target areas	
<b>J</b>	Hold a meeting with all health centre staff and village volunteers to plan the dates you will go to each village	
<b>K</b>	Inform the village chiefs and community in each village about the supplementation round	
<b>L</b>	Check you have enough IEC material and tally sheets for vitamin A round, order as necessary	



# NOTES:

**Slide 112 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# WHAT IS ANEMIA?

- Anemia is a deficiency in the amount of red blood cells. Red blood cells carry oxygen around the body
- Iron Deficiency Anemia is the most common form of anemia
- Iron Deficiency Anemia can be prevented by adequate iron intake

Anemia is defined as a low level of hemoglobin in the blood, as evidenced by a reduced quality or quantity of red blood cells. It has serious consequences, including:

- ▶ Increased mortality in women and children
- ▶ Decreased capacity to learn
- ▶ Decreased productivity in all individuals
- ▶ Significant economic losses for individuals and for countries with high anemia prevalence.

## **CAUSES of ANEMIA**

Anemia has multiple causes.

### **Direct causes:**

- ▶ poor, insufficient, or abnormal red blood cell production
- ▶ excessive red blood cell destruction
- ▶ excessive red blood cell loss.

Contributing causes include poor nutrition related to dietary intake, dietary quality, sanitation, and health behaviors; adverse environmental conditions, lack of access to health services; and poverty. Fifty per cent of all anemia is thought to be due to iron deficiency

The main causes of anemia in young children includes inadequate iron intake from daily food consumption; vitamin A deficiency, vitamin B12 deficiency, malaria and helminthes infection, hookworm in particular, and genetic blood disorders such as thalassaemia and other haemoglobinopathies

# IRON DEFICIENCY ANEMIA



- Not enough iron in the blood
- Iron helps the blood to transport oxygen
- Oxygen is necessary for the production of energy in the body

# NOTES:

**Slide 114 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Iron is needed to make haemoglobin which is the substance in red blood cells that carries oxygen to the cells of the body.

The body's cells need oxygen to function and enable a person to perform all physical and mental activities. When haemoglobin levels are low, as in a person who has anemia, less oxygen reaches the cells to support the body's activities. The heart and lungs also must work harder to compensate for the blood's low capacity to carry oxygen.



# IRON IS IMPORTANT

- Iron helps to protect against iron deficiency anemia
- Iron helps the body to produce energy (mental and physical abilities)

# NOTES:

Slide 115 : MPA Module 10 Nutrition  
Facilitators slides and notes





# DE-WORMING IS IMPORTANT

- Worms are parasites
- Worms can cause Anemia
- Mebendazole is given for deworming



Worm infections can contribute to under nutrition and poor growth in children – especially roundworm ( ascaris) and hookworm.

**Both types of worms can cause:**

- ▶ Poor appetite
- ▶ Poor digestion and absorption of nutrients for example fat
- ▶ Increased loss of nutrients from the gut for example iron and protein

**Results of worm infection:**

- ▶ Anemia particularly hookworm infection
- ▶ Protein energy malnutrition
- ▶ Other micronutrient deficiencies such as Vitamin A deficiency

**Consequences**

- ▶ Increased risk of other infections
- ▶ Reduced energy /tired /listless
- ▶ Decreased ability to work
- ▶ Poor performance in children



## **EFFECTS OF IRON DEFICIENCY ANEMIA**

- Increased mortality in women and children
- Decreased learning capacity
- Decreased physical capacity
- Decreased productivity

## Maternal health:

Anemia reduces a woman's ability to survive bleeding during and after childbirth. Women with anemia-related fatigue are at risk of longer labor thus prolonging delivery. Any kind of anemia during pregnancy even moderate and mild increases a woman's risk of maternal mortality

## Child Anemia

Anemia is associated with premature births, intrauterine growth retardation, and low birth weight in infants. In turn premature, underdeveloped, and underweight infants have decreased chances of survival. If they survive, they may have (both as infants and later as children) physical and mental developmental problems, including learning deficits, eating disorders such as anorexia, and poor growth.

Full-term infants of anemic mothers have reduced iron stores and are at risk of becoming anemic during the first six months of life. Iron-deficiency anemia, particularly in children under 2 years of age, can result in irreversible learning problems even if the iron deficiency and resulting anemia are corrected.

### **The main consequences of anemia for young children including:**

- ▶ reduced immunity – increased morbidity and mortality
- ▶ impaired growth
- ▶ impaired psychomotor development
- ▶ affected intellectual development
- ▶ lethargy and tiredness

### **References:**

Galloway, Rae ( 2003) Anemia Prevention and Control: What works. World Bank Publication  
Stoltzfus, RJ; Mullay, L; Black, R. ( 2005) Iron Deficiency Anemia: Comparative Quantification of Health Risks, The Global Burden of Health Disease due to 25 selected major risk factors. Harvard University Press  
Stoltzfus, RJ; Dreyfuss,L. Guidelines for the Use of Iron Supplement to Prevent and Treat Iron Deficiency Anemia. International Anemia Consultative Group (INACG) ILLSI Press.



## CAUSES OF IRON DEFICIENCY ANEMIA

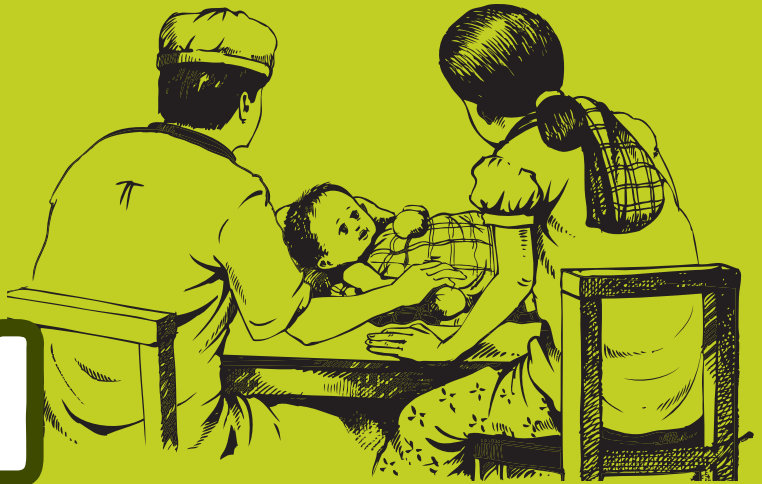
- Not eating enough iron rich food
- Repeated pregnancies
- Blood loss, after childbirth and menstruation

# NOTES:

**Slide 118 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# CAUSES OF IRON DEFICIENCY



## Repeated infections with:

- worms
- malaria
- chronic diarrhoea
- dysentery

# NOTES:

**Slide 119 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# CAUSES OF IRON DEFICIENCY



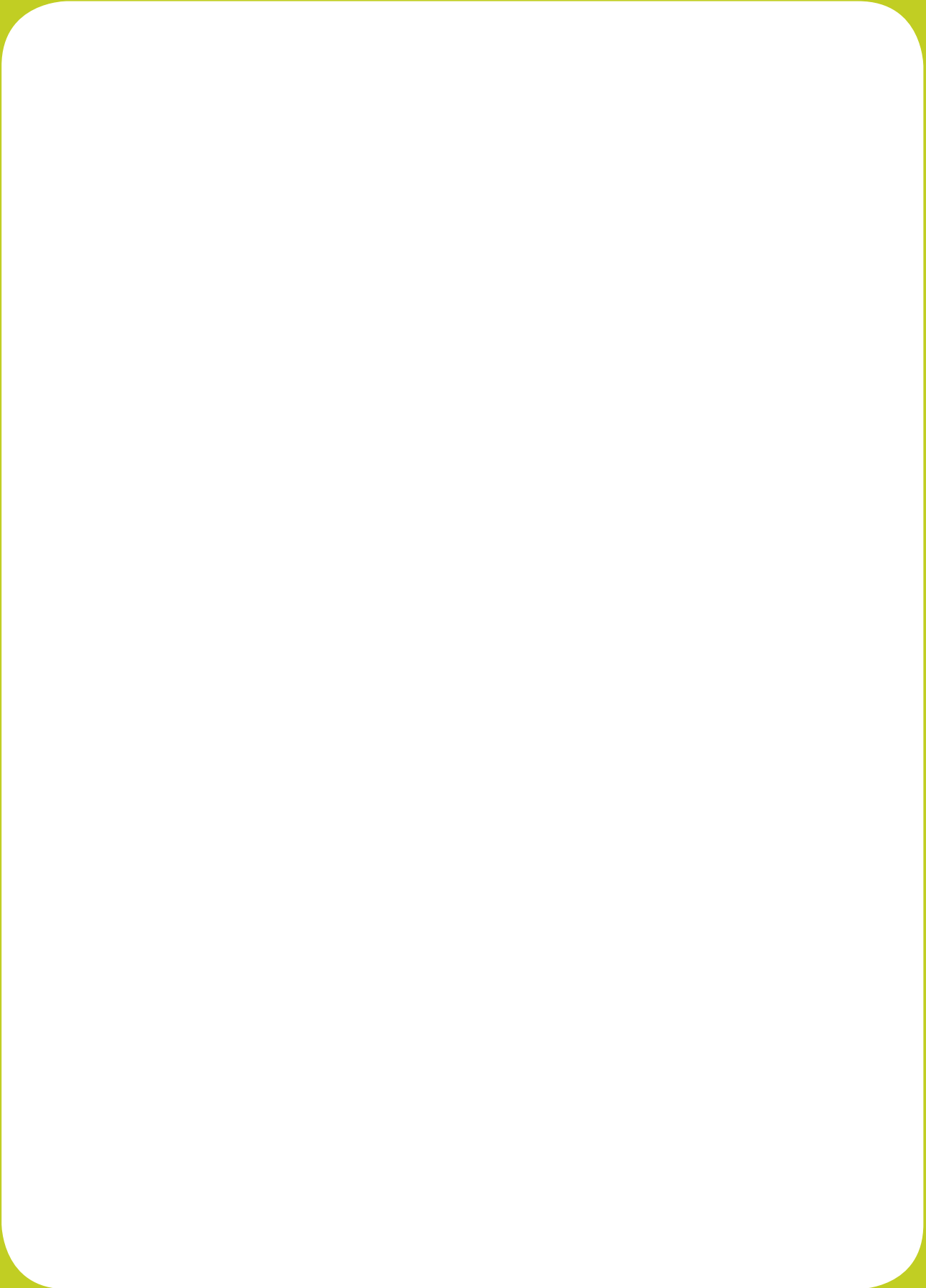
## Increased need for iron during:

- Pregnancy periods of rapid growth
- Abnormalities of the red blood cells (e.g. thalassemia)

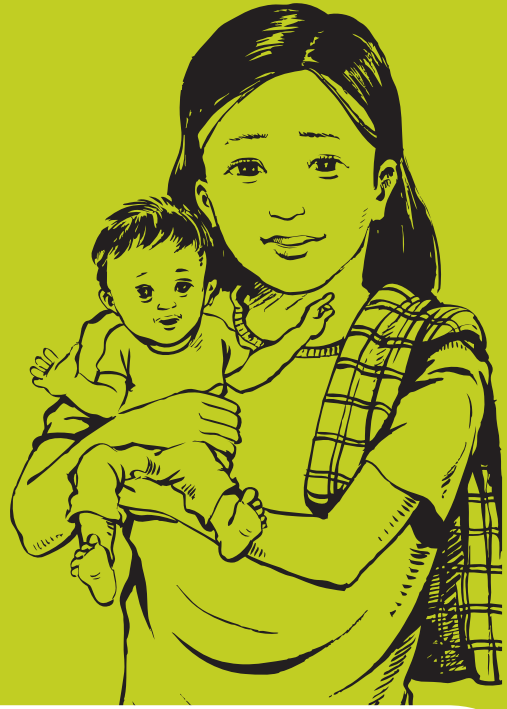


# NOTES:

**Slide 120 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# AT RISK GROUPS



- Infants 0-24 months
- Women of Reproductive Age
- Pregnant women
- Post partum women

# NOTES:

**Slide 121 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Until 6 months of age, normal-weight, full-term infants who are born to healthy mothers and are exclusively breastfed receive enough iron from their own stored iron and from breast milk. Their stored iron is exhausted in about six months.

Additional iron is then required because the iron content of unfortified conventional complementary foods is insufficient to meet the high iron requirements of growing 6- to 24-month-old infants and children.

Infants and children who do not obtain adequate iron will suffer cognitive impairment that will affect their ability to learn and to perform income-earning tasks later in life. Iron supplements provided after 24 months of age may not correct this cognitive impairment.

Low-birth weight infants, premature infants, and infants of mothers with anemia need additional iron starting at about 2 months of age to build iron stores and meet the requirements of their rapid growth. The iron requirements of children with severe malnutrition and anemia need special attention.

Women are at risk for anemia because they lose blood during menstruation. During pregnancy they must provide their growing fetus with iron. Closely spaced pregnancies are likely to cause anemia. Post partum women provide iron to their baby in breast milk and need additional iron to meet the needs of the newborn baby.

# CLINICAL SIGNS OF ANEMIA

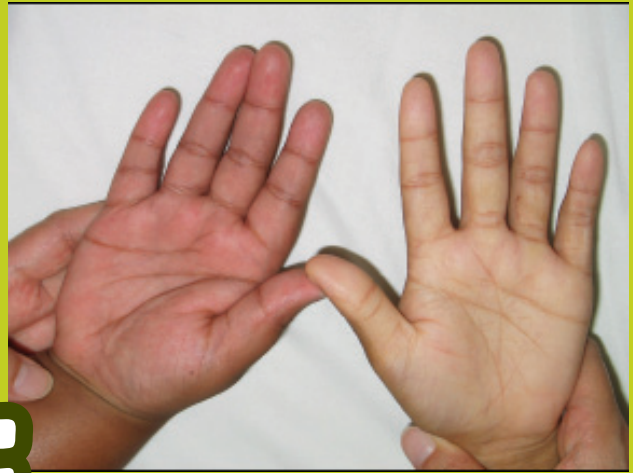


- Fatigue and breathlessness

# NOTES:

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Facilitators slides and notes

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# CLINICAL SIGNS OF ANEMIA

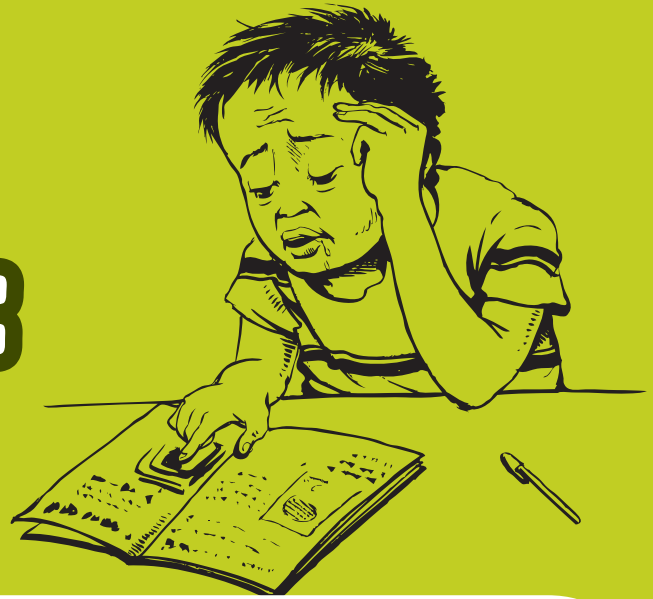
- Palmar pallor (pale palms)

# NOTES:

**Slide 123** : MPA Module 10 Nutrition  
Facilitators slides and notes

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# CLINICAL SIGNS OF ANEMIA

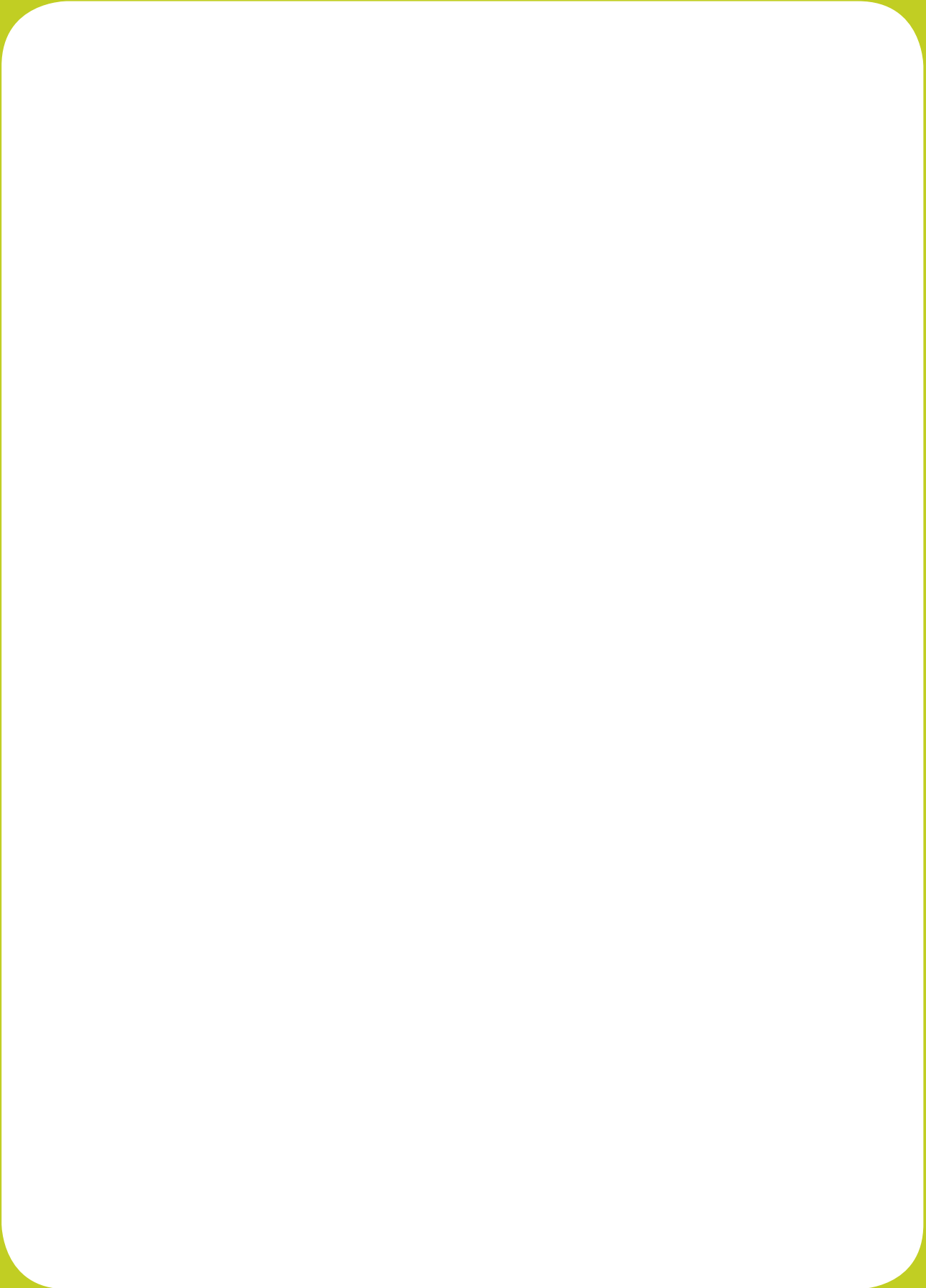


- Slow learning in children



# NOTES:

**Slide 124 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# CLINICAL SIGNS OF ANEMIA



- Weakness, no physical strength

# NOTES:

Slide 125 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# PREVENTION

- Iron rich diet
- Prevention of infectious and parasitic diseases
- De-worming (Mebendazole)

## Promote consumption of Iron rich diets

**Food-based approaches should therefore include strategies to:**

- ▶ Improve the year-round availability of micronutrient-rich foods;
- ▶ Ensure the access of households, especially those at risk, to these foods;
- ▶ Change feeding practices with respect to iron rich foods.

***Bioavailability of food iron is strongly influenced by enhancers and inhibitors in the diet.***

**Enhancers of iron absorption include:**

- ▶ haem iron, present in meat, poultry, fish, and seafood;
- ▶ ascorbic acid (vitamin C), present in fruits, juices,
- ▶ potatoes and some other tubers, and other vegetables such as green leaves, cauliflower, and cabbage;
- ▶ some fermented or germinated food and condiments,

**Inhibitors of iron absorption include:**

tea, coffee, cocoa, herbal infusions and certain spices

# PREVENTION

## **Iron/Folate tablets for:**

- Women of Reproductive Age
- Pregnant women
- Post partum women

# NOTES:

Slide 127 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# PREVENTION TABLE

Target group	Dose Iron/Folate	Dose Mebendazole
Women of Reproductive Age	WIF ( Weekly Iron/Folate) 1 tablet per week (1 tablet contains 60mgs Iron and 2.50 µg Folic Acid)	
Pregnant women	90 days 1 tablet per day provide 60 on 1st visit provide 30 on 2nd visit (1 tablet contains 60mgs Iron and 400ug Folic Acid)	1 dose (=500 mgs) after 3 months of pregnancy
Postpartum women	42 days 1 tablet per day (1 tablet contains 60mgs Iron and 400ug Folic Acid)	1 dose (=500 mgs)
Children (1 -2 years)		½ dose (=250 mgs) every 6 months, together with VAC distribution: 1 dose 200,000 IU.
Children (2 -4 years)		1 dose (=500 mgs) every 6 months, together with VAC distribution: 1 dose 200,000 IU.



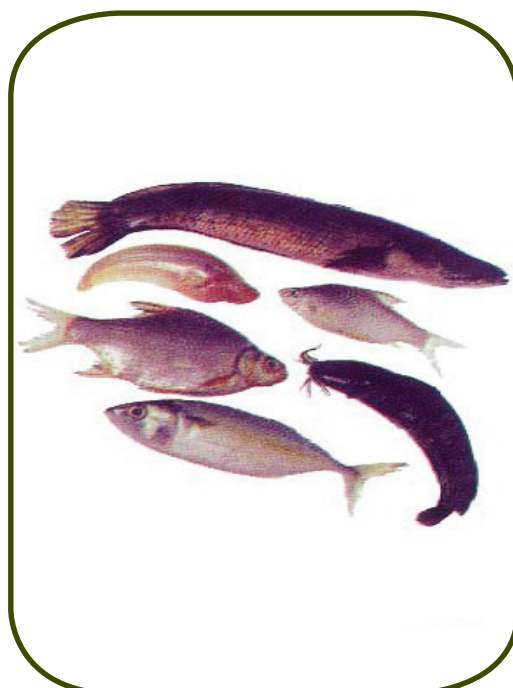
# NOTES:

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Facilitators slides and notes

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# IRON RICH FOODS

- Animal products:
- Meat (red meat)
- Liver
- Fish
- Chicken
- Eggs



# NOTES:

Slide 129 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# IRON RICH FOODS

- Soy beans
- Green leafy vegetables
- Ground nuts

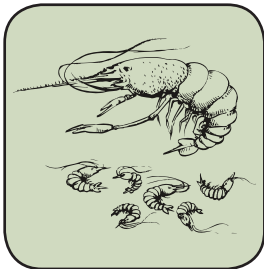
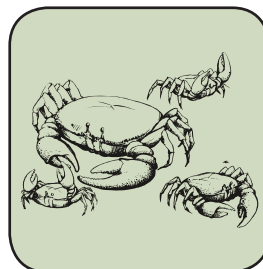
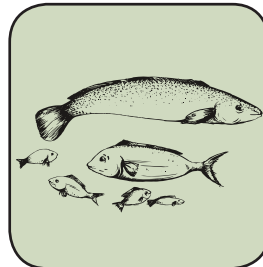
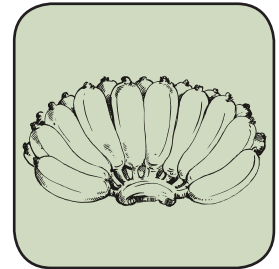
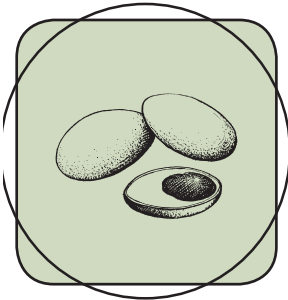


# NOTES:

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Facilitators slides and notes

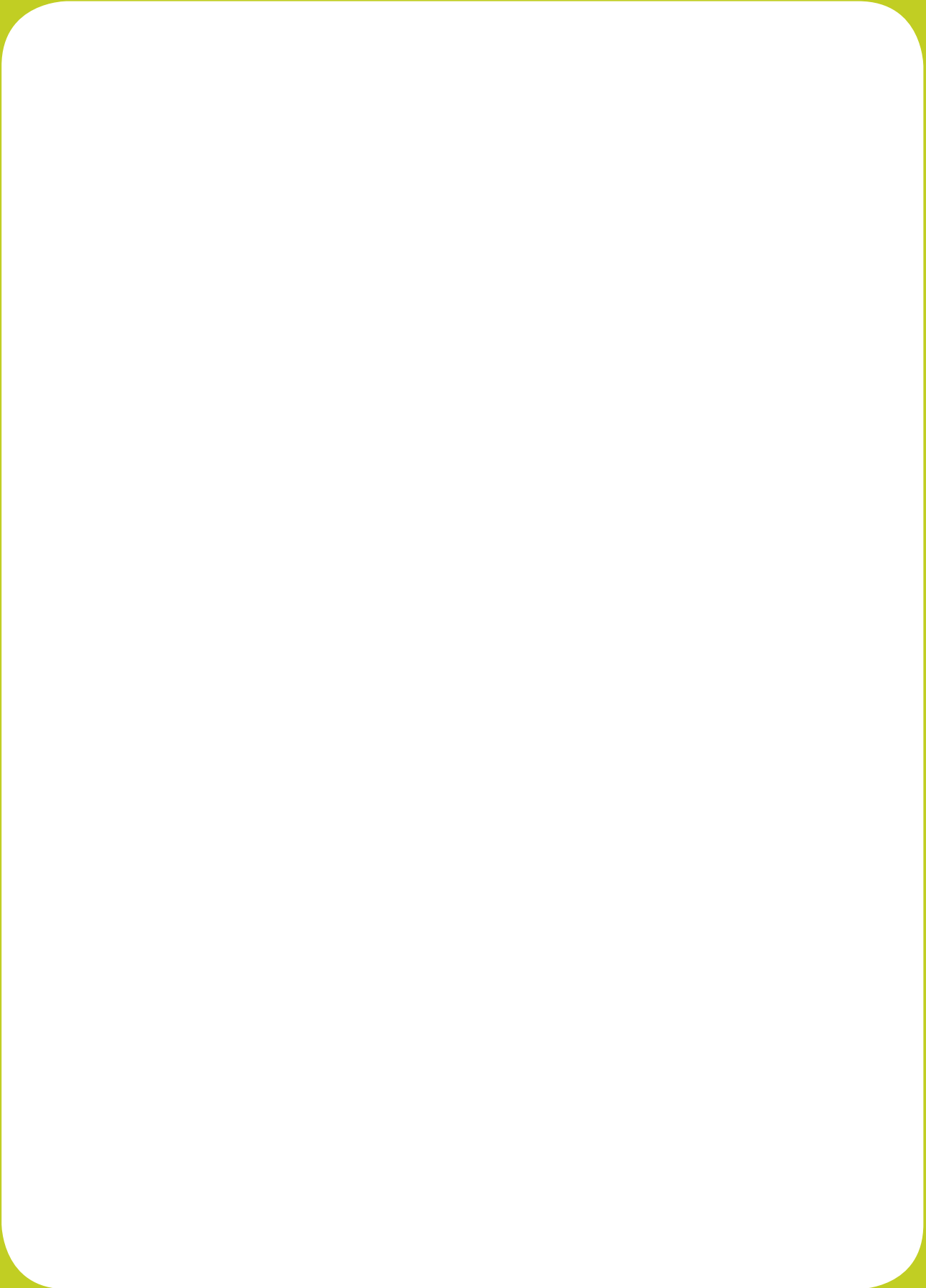
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# EXERCISE H- IRON RICH FOODS



# NOTES:

**Slide 131 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# TREATMENT TABLE FOR SEVERE PALMAR PALLOR

Symptoms / Illness	Age / group	Dose of Iron/Folate (1 dose contains 60mgs Iron and 400ug Folic Acid)
Severe palmar pallor Severe anemia	Pregnant (gestation less than 36 weeks pregnant) Postpartum women WRA	1 tablet x 2 times per day (morning and evening) for 3 months
	Pregnant (36 gestation weeks and over)	<b>Refer to Referral Hospital immediately for hospitalisation until delivery</b>
	Children 0-5 months	<b>Do not give Iron</b> 1 VAC 50,000 IU <b>Refer urgently to hospital</b>
	Children 6-11 months	<b>Do not give Iron</b> 1 VAC 100,000 IU <b>Refer urgently to hospital</b>
	Children 1-12 years	<b>Do not give Iron</b> 1 VAC 200,000 IU <b>Refer urgently to hospital</b>



# NOTES:

Slide 132 : MPA Module 10 Nutrition  
Facilitators slides and notes



# TREATMENT TABLE FOR SEVERE PALMAR PALLOR

Symptoms / Illness	Age / group	Dose of Iron/Folate (1 dose contains 60mgs Iron and 400ug Folic Acid)
Some palmar pallor	Pregnant women	1 tablet of Iron/Folate x 2 day for 14 days. Follow up after 14 days. If still anaemic repeat the treatment for 14 days and follow up
	Postpartum women	
Mild or moderate anaemia	WRA	
	4 - 12 months (6 - <10 kg)	¼ dose Iron/Folate a day for 14 days and reassess after treatment
	1–5 years (10 - 19 kg)	½ dose Iron/Folate a day for 14 days and reassess after treatment

# NOTES:

**Slide 133** : MPA Module 10 Nutrition  
Facilitators slides and notes



# HOW TO TAKE THE TABLETS

- During meals
- With vitamin C rich fruits such as ripe mango, oranges, sweet tamarind
- Not with antibiotics

# NOTES:

Slide 134 : MPA Module 10 Nutrition  
Facilitators slides and notes



# KEY MESSAGES

- Provide Iron/Folate tablets to women during pregnancy (60 tablets at first contact and 30 tablets at second contact)
- Provide Iron/Folate tablets to post partum women (42 tablets) as soon as possible after delivery
- Promote intake of iron rich food

# NOTES:

Slide 135 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# KEY MESSAGES

- Promote consumption of fruits (Vitamin C)
- Promote de-worming of all children 12-59 months every six months
- Promote de-worming of pregnant women (after the first 3 months of pregnancy) and post-partum women within the first six weeks after delivery
- Advise not to take iron tablets with tea or coffee
- Treat Malaria, as advised by National Malaria Guidelines



# NOTES:

Slide 136 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# OBJECTIVES OF DAY 5

- To answer the questions about the Iron program
- To repeat the Iron lessons learned
- To train counselling skills for Iron activities
- To provide knowledge on Iodized Salt program
- To train salt testing to participants

# NOTES:

Slide 137 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# SKILLS OBJECTIVES OF DAY 5

**At the end of the day, participants are able to:**

- 1** Communicate iron messages to women and other caregivers with confidence
- 2** Fill in the tally forms for iron distribution
- 3** Deliver effective group counselling sessions and presentations

# NOTES:

**Slide 138 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# EXERCISE- SOKUN

- Questions
- Advice
- Support

# NOTES:

**Slide 139 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# EXERCISE= BOPHA



- Questions
- Advice
- Support



# NOTES:

**Slide 140 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# EXERCISE- SO THEAVY

- Questions
- Advice
- Support

# NOTES:

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Facilitators slides and notes

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# WHAT IS IODINE?

- Iodine is a nutrient that is added to salt
- Only salt that has been fortified with iodine contains iodine

# NOTES:

Slide 142 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# IODINE IS IMPORTANT



- Iodine is needed to produce thyroid hormones. Thyroid hormones are essential for normal physical and mental activity
- The thyroid gland where thyroid gland is produced is located at the base of the neck

# NOTES:

**Slide 143 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Iodine is an essential micronutrient in the diet.

It's most important known function is as a component of thyroid hormones. Thyroid hormones are produced by the thyroid gland (located at the base of the neck). Thyroid hormones play a vital role in the regulation of metabolic processes such as growth and energy expenditure. They are essential throughout childhood for normal brain development.

Iodine is also critical for normal development of the baby in the womb, so for women who plan to become pregnant, iodine intake is one of the important nutritional factors they need to take into account.

The thyroid gland does not have the capacity to store enough iodine so small amounts of iodine must be consumed regularly in the diet.



# IODINE IS IMPORTANT

- Promotes growth in children



# NOTES:

**Slide 144 : MPA Module 10 Nutrition**  
Facilitators slides and notes

Iodine deficiency occurs in individuals who do not get adequate iodine in their diet.

If there is not enough iodine in the diet the thyroid gland is presented with the challenge of maintaining production of thyroid hormones for metabolic demands, despite one of the essential components (iodine) being in short supply.

Under these circumstances, the thyroid gland enlarges in order to become more effective at its job. This is known as 'goitre', and is the most obvious sign of iodine deficiency.

Other changes in physiology can also occur, such as a reduction in thyroid hormone utilization by the body resulting in lower blood levels of thyroid hormones—a condition known as hypothyroidism.

This poses a health hazard for all affected people because it can lead to weight gain, lethargy, intolerance to cold, increased blood cholesterol, mental slowness and reduced heart function.



# NOTES:

Slide 145 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# NOTES:

**Slide 146 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# EFFECTS OF IODINE DEFICIENCY



- Goiter

Goiter is the enlargement of the thyroid gland in the base of the neck caused by lack of iodine in the diet.

The thyroid gland enlarges in an effort to collect more iodine from the blood. If the enlarged gland produces enough thyroid hormone the body works normally. The goitre is the only problem.

If the gland fails to produce enough thyroid hormone the person becomes **HYPOTHYROID**

**A person who is hypothyroid:**

- ▶ feels cold easily
- ▶ moves slowly and lacks energy
- ▶ thinks slowly
- ▶ may be sleepy
- ▶ has dry skin

**Women who are hypothyroid during pregnancy may have:**

- ▶ miscarriage or stillbirth
- ▶ low birth weight baby
- ▶ baby with congenital abnormality

# EFFECTS OF IODINE DEFICIENCY



- Cretinism



A baby born to a mother who is hyperthyroid may have cretinism. This can be prevented if the woman is treated before she becomes pregnant.

## **Cretinism: Two types**

### **Neurological cretism and hypothyroid cretism**

#### **1. Neurological cretism – mother iodine deficient in early part of pregnancy**

- ▶ severe mental handicap
- ▶ weakness and stiffness of legs
- ▶ squint – the eyes are not held straight
- ▶ deafness and mutism ( child cannot speak )

#### ***NEUROLOGICAL CRETINISM CANNOT BE TREATED***

#### **2. Hypothyroid cretism – mother iodine deficient in later pregnancy**

##### **A child who is hypothyroid:**

- ▶ Grows slowly and is mentally handicapped and very short
- ▶ Poor appetite
- ▶ Fails to gain weight

***If the baby is treated with iodine the signs may improve or disappear. The earlier the child receives iodine the better the results***

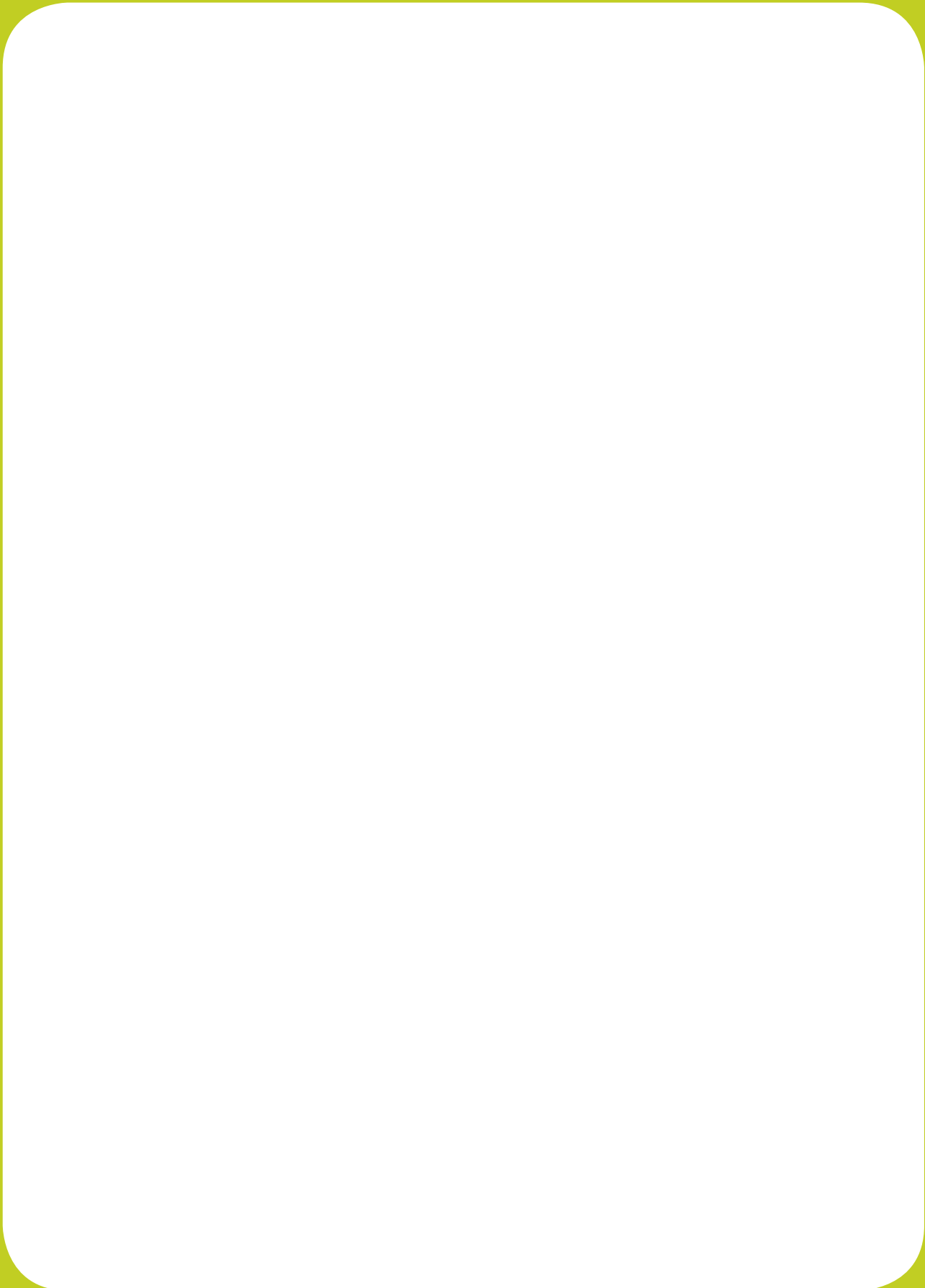
# EFFECTS OF IODINE DEFICIENCY



- Miscarriages, still births, low birth weight, deformities
- Fatigue and slow movements

# NOTES:

**Slide 149 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# CAUSES OF IODINE DEFICIENCY

- Lack of Iodine in the daily diet
- Lack of food variety

# NOTES:

Slide 150 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# AT RISK GROUPS



- Anyone who does not use Iodized Salt

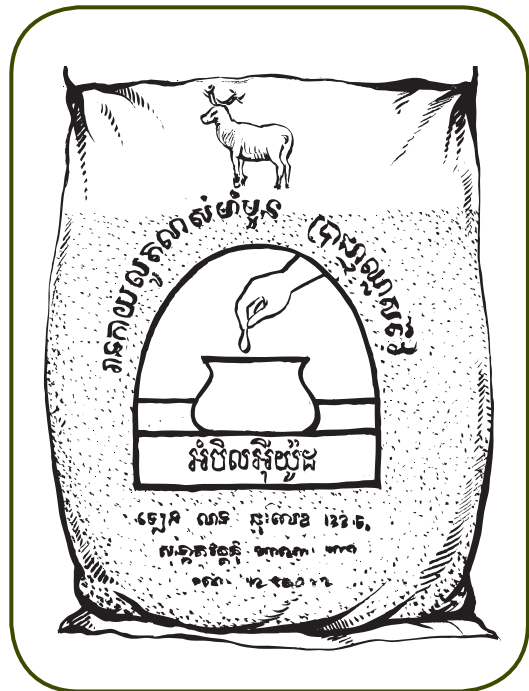
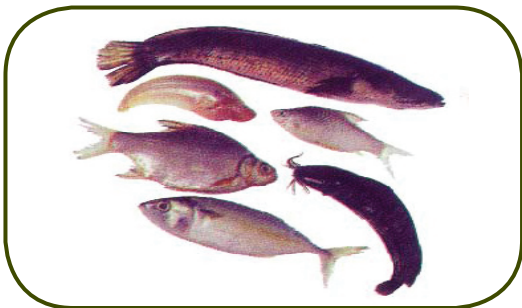
# NOTES:

Slide 151 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# PREVENTION

- Eat iodine rich foods
- Sea fish
- Sea food
- Iodized salt





# NOTES:

Slide 152 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# PREVENTION

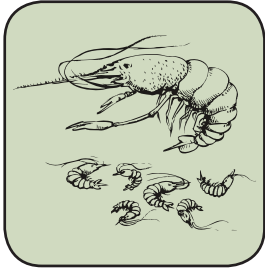
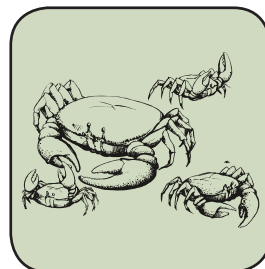
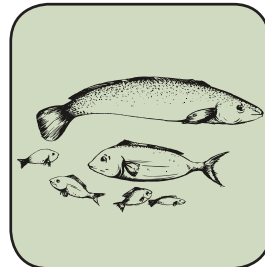
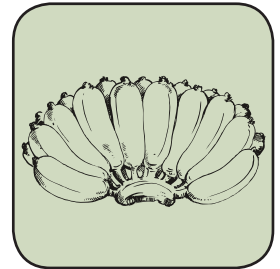
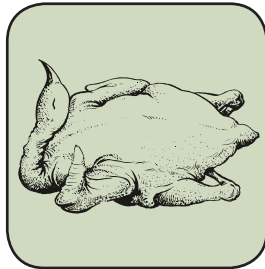
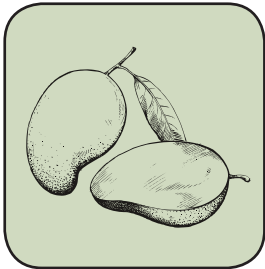
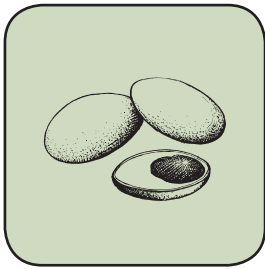
- Use of iodized salt
- Test iodized salt

# NOTES:

**Slide 153** : MPA Module 10 Nutrition  
Facilitators slides and notes



# EXERCISE J- IODINE RICH FOOD



# NOTES:

**Slide 154 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# PRESENTING TO GROUPS

- Prepare date, time and place
- Invite the people you want to join
- What materials do you need?

# NOTES:

Slide 155 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# PRESENTING TO GROUPS


## **Be:**

- Calm
- Friendly
- In a quiet place



# NOTES:

**Slide 156 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# PRESENTING TO GROUPS

- Make eye contact with all people
- Smile
- Keep a natural posture

# NOTES:

**Slide 157 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# PRESENTING TO GROUPS

- Listen carefully to the participants
- Talk with the participants, not to them
- Discuss consequences
- Answer questions

# NOTES:

**Slide 158 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# PRESENTING TO GROUPS

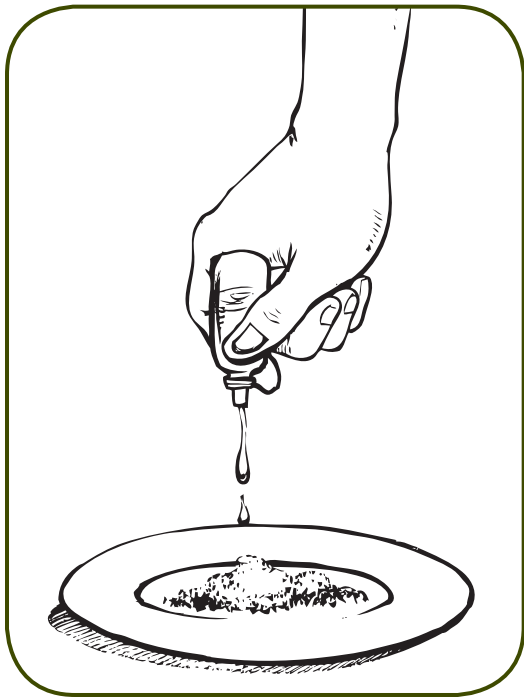
- Stand in big groups
- Sit with small groups
- Point at pictures

# NOTES:

Slide 159 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# TESTING THE SALT





# NOTES:

Slide 160 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# OBJECTIVES OF DAY 6

- To repeat the lessons learned on Iodine
- To teach immunization activities
- To teach the antenatal visit activities
- To train the antenatal visit activities (field visits)
- To train how to use the mother card

# NOTES:

**Slide 161 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# SKILLS OBJECTIVES OF DAY 6

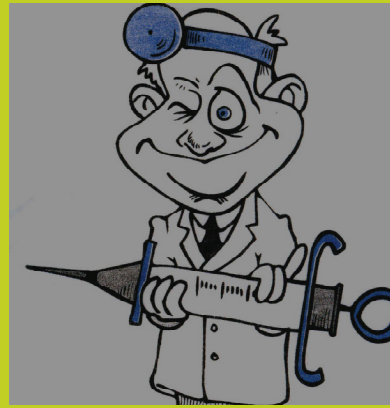
**At the end of the day, participants are able to:**

- 1.** Provide the appropriate immunizations to women and children
- 2.** Use the antenatal job aid for the antenatal care field practise of Day 7

# NOTES:

Slide 162 : MPA Module 10 Nutrition  
Facilitators slides and notes





# IMMUNIZATION

- Provided by injections and orally
- Protects against some diseases

# NOTES:

**Slide 163** : MPA Module 10 Nutrition  
Facilitators slides and notes





# TETANUS

- Muscle disease

## **Provided to:**

- Pregnant women
- Post partum women (if not provided during pregnancy)



# NOTES:

**Slide 164 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# TUBERCULOSIS

- Respiratory disease

**Provided to:**

- Children

**As: BCG**

- Do not provide when child has symptoms of HIV+

# NOTES:

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Facilitators slides and notes

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# **POLIO**

- Child paralysis

**Provided to:**

- Children

**As:**

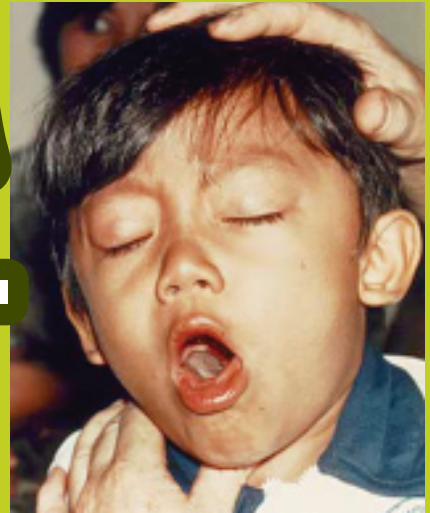
- OPV – oral polio vaccine

# NOTES:

Slide 166 : MPA Module 10 Nutrition  
Facilitators slides and notes



# DIPHTHERIA PERTUSSIS- TETANUS



- Respiratory disease muscle disease

**Provided to:**

- Children

**As:**

- DPT / DPT-HB

**NOT when:**

- Hypersensitivity known

# NOTES:

Slide 167 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# HEPATITIS B

- Liver infection

**Provided to:**

- Babies (HB-0)
- Children

**As:**

- HB / DPT-HB

**NOT when:**

- Hypersensitivity known



# NOTES:

**Slide 168 : MPA Module 10 Nutrition**  
Facilitators slides and notes





# MEASLES

- Infectious skin disease

**Provided to:**

- Children

**As:**

- Measles injection

# NOTES:

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Facilitators slides and notes

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# **NUTRITION MESSAGES**

## **During immunization contact:**

### **Counsel on nutrition:**

- Vitamin A
- Iron
- Iodine
- Feeding practices

# NOTES:

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Facilitators slides and notes

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# IMMUNIZATION...

- Prevents people from getting certain illnesses
- Works only when complete course is provided

# NOTES:

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Facilitators slides and notes

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# RECORD IMMUNIZATIONS IN...

- Mother Card
- Child Health Card



# NOTES:

Slide 172 : MPA Module 10 Nutrition  
Facilitators slides and notes



# DO NOT PROVIDE IMMUNIZATION WHEN...

- Child is very sick
- Child needs to be referred to hospital

# NOTES:

**Slide 173 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# TETANUS TOXOID FOR WOMEN

Target group	Dose	Notes
Women	TT 1 <sup>st</sup> dose during 1 <sup>st</sup> contact 2 <sup>nd</sup> dose at least 1 month after 1 <sup>st</sup> 3 <sup>rd</sup> dose at least 6 months after 2 <sup>nd</sup> 4 <sup>th</sup> dose at least 1 yr after 3 <sup>rd</sup> 5 <sup>th</sup> dose at least 1 yr after 4 <sup>th</sup> dose	If all doses have been given in the past, do not provide again.

# NOTES:

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Facilitators slides and notes

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# MESSAGES TO WOMEN

- If a mother becomes pregnant again:
  - ▶ check previous immunisation record and provide additional doses of TT as necessary following the protocol

# NOTES:

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Facilitators slides and notes

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# INFANTS IMMUNIZATION TABLE

Target group	Dose	Notes
Babies at birth	<b>BCG</b> - Single dose <b>HBO</b> - Single dose	<b>BCG</b> can be provided up until one year after birth Do not provide <b>BCG</b> if HIV signs present <b>HBO</b> should be provided 24 hours after birth, but may be given under 7 days



# NOTES:

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Facilitators slides and notes

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# INFANTS IMMUNIZATION TABLE

Target group	Dose	Notes
Children after 6 weeks until 1 year	<b>OPV, DPT OR DPT-HB</b> 1 <sup>st</sup> dose 6 weeks after birth 2 <sup>nd</sup> dose at least 4 weeks after 1 <sup>st</sup> dose 3 <sup>rd</sup> dose at least 4 weeks after 2 <sup>nd</sup> dose <b>Measles</b> 1 (single dose) At least 9 months after birth	Do not miss any immunization dates. Immunizations will not work if missed. For <b>DPT-HB</b> do not immunize when a child is VERY sick with high fever >38.5 C Do not give <b>DPT/DPT-HB</b> when hypersensitivity is known. Record immunizations on Child Health Card and in HC records

# NOTES:

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Facilitators slides and notes

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# CONTRA INDICATIONS

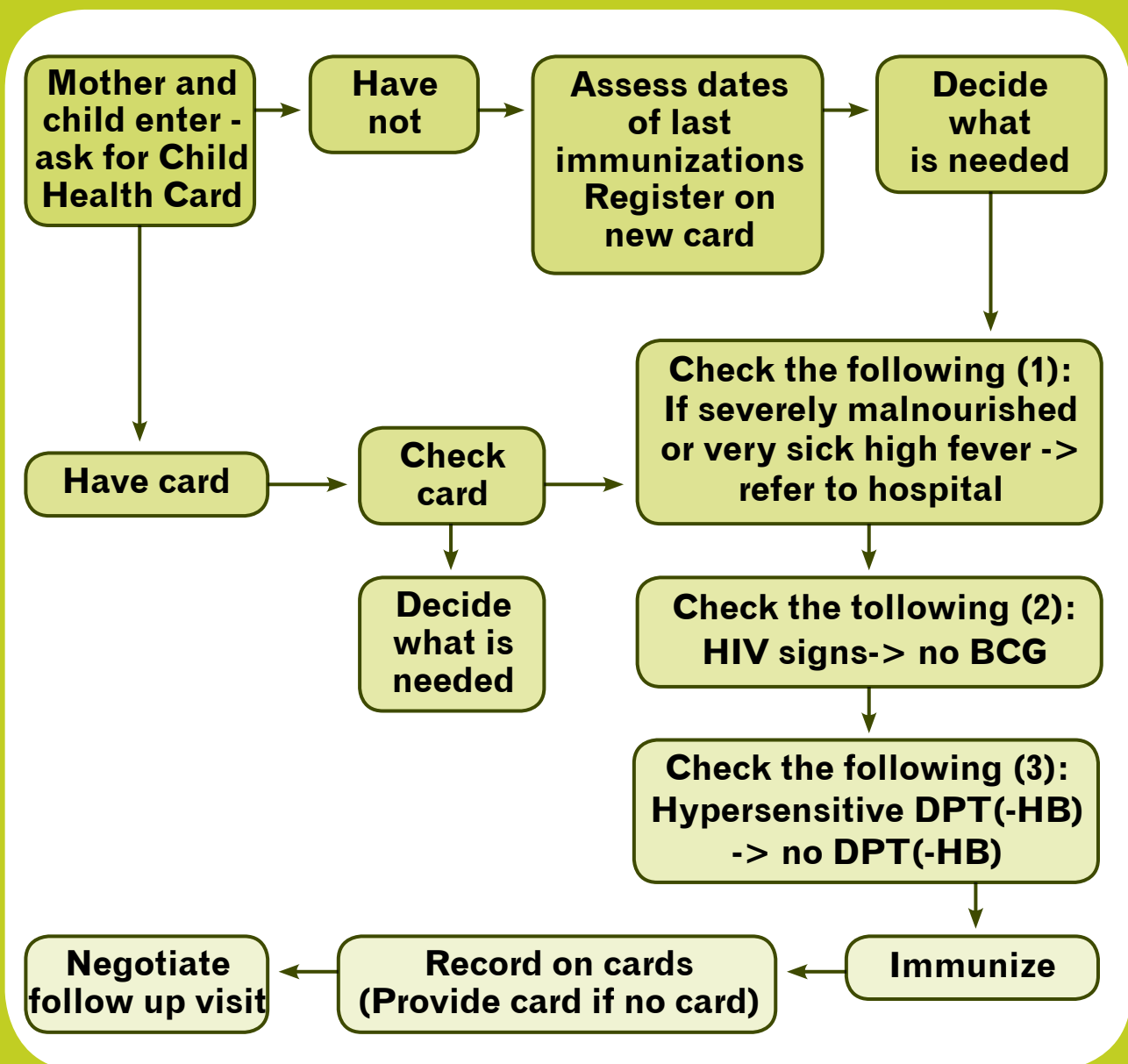
- Child has VERY (high fever  $>38.5$  C)
- BCG: Do not provide when child shows signs of HIV
- Do not provide DPT/DPT-HB when hypersensitivity is known

# NOTES:

Slide 178 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# IMMUNIZATION FLOW CHART



# NOTES:

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Facilitators slides and notes

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# IMMUNIZATION JOB AID

## IMMUNIZATION CONTACT



BE FRIENDLY  
SMILE  
LISTEN

01

Ask for child health card  
Ask for Mother card, check information on cards

02

Check immunization status of the child

Provide if necessary, use the table below

target group	DOSE	Notes
Babies at birth	<b>BCG</b> - Single dose <b>HBO</b> - Single dose	<b>BCG</b> can be provided up until one year after birth, not when signs of HIV <b>HBO</b> should be provided 24 hours after birth, but may be given under 7 days.
Children after 6 weeks and 1 year	<b>OPV, DPT OR DPT-HB</b> 1 <sup>st</sup> dose 6 weeks after birth 2 <sup>nd</sup> dose at least 4 weeks after 1 <sup>st</sup> dose 3 <sup>rd</sup> dose at least 4 weeks after 2 <sup>nd</sup> dose <b>Measles</b> 1 (single dose) at least 9 months after birth	Do not miss any immunization dates. Immunizations will not work if missed. For <b>DPT-HB</b> do not immunize when a child is <b>VERY</b> sick with high fever >38.5 C Do not give <b>DPT/DPT-HB</b> when hypersensitivity is known. Record immunizations on Child Health Card and in HC records.

03

Check tetanus (TT) status of the mother

Check if the mother had previous TT immunizations.

Decide which dose should be given.

If all doses have been given in the past, **DO NOT PROVIDE AGAIN.**

1<sup>st</sup> dose during 1<sup>st</sup> contact

2<sup>nd</sup> dose at least 1 month after 1<sup>st</sup>

3<sup>rd</sup> dose at least 6 months after 2<sup>nd</sup>

4<sup>th</sup> dose at least 1 yr after 3<sup>rd</sup>

5<sup>th</sup> dose at least 1 yr after 4<sup>th</sup> dose





# NOTES:

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Facilitators slides and notes

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# IMMUNIZATION JOB AID

04

**Evaluate child's health**  
Ask mother if she has any concerns for her child?

- Evaluate child's health – if any problems treat according to the integrated Management of Childhood illnesses (IMCI) protocols and refer if necessary
- Check child's age in completed weeks, months, years
- Check length/height (if equipment is available)
- Check weight
- If small baby ( below 2.5kgs - low birth weight) encourage mother to provide breast feeding every 2- 3 hours

**Teach the mother how to keep the baby warm – skin to skin contact**

- Evaluate weight based on Child Health Card ( Yellow Card)
- Explain the child's weight to the mother and counsel accordingly. Important, if severely malnourished (oedema, wasting) refer to nearest referral hospital for treatment
- Check for anaemia – treat as per national guidelines (attached at the end of this job aid)
- Check for signs of vitamin A deficiency – treat as per national guidelines (attached at the end of this job aid)

Ask if she has any concerns -

05

**Evaluate mothers' health**



- Weight
- Check blood pressure
- Check for signs of anaemia – palmar pallor
- Check for signs of Vitamin A deficiency/night blindness
- Advise her about importance of nutritious diet ( four meals per day while mother is still breastfeeding)

**Treat Anaemia and Vitamin A Deficiency as per Guidelines**

Anaemia signs		Vitamin A deficiency signs		
Some palmar pallor	Severe palmar pallor Under 36 weeks of pregnancy	Severe palmar pallor 36 weeks and over of pregnancy	Severe signs of active xerophthalmia (corneal lesion)	Night blindness Conjunctival xerosis Bitot's spots
<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>
1 tablet Iron / Folate x 2 times a day (morning and afternoon) for 14 days	1 tablet Iron/Folate x 2 times a day (morning and afternoon) for 3 months Follow up every two weeks	Do not give iron! Refer urgently to hospital	Day 1: 200,000 IU -and refer to specialist hospital Note: on hospital referral note that one dose of vitamin A has been given.	1 dose 10,000 IU a day for 30 days. If not available: 2 multivitamin tablets a day for 30 days

1 dose or tablet of Iron/Folate contains 60mg Iron and 400 µg Folic Acid

06

**Evaluate and counsel on breastfeeding**



Good attachment

**Signs of good positioning and attachment (if younger than 6 months)**

- Mother relaxed and comfortable
- Baby's body close, facing breast
- Baby's head and body straight
- Baby's chin touching breast
- Baby's bottom supported
- Baby's mouth wide open
- Baby's lower lip turned outwards
- Baby's tongue cupped around breast
- Baby's cheeks round
- More areola above baby's mouth
- Slow deep sucks, bursts with pauses
- Can see or hear swallowing
- Baby will release breast spontaneously
- Baby appears relaxed and sleep

Experienced difficulty	Counselling messages
Insufficient milk	Feed baby every 2- 3 hours. Drink at least 2 litres of water per day. Eat an extra meal per day and extra nutritious snacks such as fruits
Engorgement	Apply clean warm cloth for 5 minutes before each breast feed. If baby difficult to attach to breast express gentle some milk before feeding. Breastfeed every 2-3 hours, express remaining milk after feeds
Sore or cracked nipples	Keep clean and dry between feeds. Begin feeding on least sore breast. At the end of feed remove baby gently from the breast.
Inverted nipple(s)	Use syringe to pull out the nipples before breastfeeding

# NOTES:

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Facilitators slides and notes

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# IMMUNIZATION JOB AID

## Counsel on continuous breastfeeding

- Breastfeed exclusively for the first 6 months (Exclusive breast feeding)
- Start complementary feeding from 6 months of age.
- Continue breastfeeding until the child is at least 2 years old and beyond.



Refer to complementary feeding page in this job aid.

07

### Check if mother received vitamin a after delivery or post partum contacts

If not, provide mother 1 VAC 200,000 IU (Only within 6 weeks after delivery)

08

### Check if mother received iron/folate tablets during delivery or post partum contacts

- If not, provide mother with 42 tablets

Take 1 tablet every day (1 tablet contains 60 mgs iron and 400 µg Folate)

- Explain side effects: black stools, discomfort, nausea, diarrhoea or constipation
- Explain that these side effects are not dangerous, advise to take the tablets with meals or at bedtime
- Advise about nutritious diet with iron rich foods

09

### Check if mother received iron/folate tablets during delivery or post partum contacts

- If not, provide mother with 1 dose (=500 mg) Mebendazole

10

Fill out Mother card  
Fill out child health card  
Fill out HC record book

11

### Negotiate return visit



- When you or your child are sick
  - Remind mother to bring Child Health Card to every health visit




Remind about the importance of Vitamin A supplementation twice per year (around May and November) when the child is aged 6-59 months.  
'Vitamin A Saves Children's Lives'

### Referral for Treatment of Severe Vitamin A Deficiency Eye Disease

Province	Name of Hospital
Phnom Penh	Angduong Hospital (Street 110 Phnom Penh)
Kandal	Chey Chum Neas Hospital Takmoh District
Siem Reap	Angkor Children's Hospital
Takeo	Provincial Hospital

# NOTES:

Slide 182 : MPA Module 10 Nutrition  
Facilitators slides and notes



# IMMUNIZATION CONTACT SUPPLEMENTARY FEEDING GUIDELINES

**When an infant is 6 months old give complementary food. Add a variety of foods to thick rice porridge. Feed frequently according to the infants age and continue breast feeding**

<b>6 months</b> 			
<b>7 - 8 months</b> 			
<b>9 -11 months</b> 			
<b>12 months and above</b> 			

# NOTES:

**Slide 183** : MPA Module 10 Nutrition  
Facilitators slides and notes

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# NARITH

- Narith is 14 weeks old
- The son of Theavy
- Child Health Card
- Has had all immunizations
- HIV+ signs

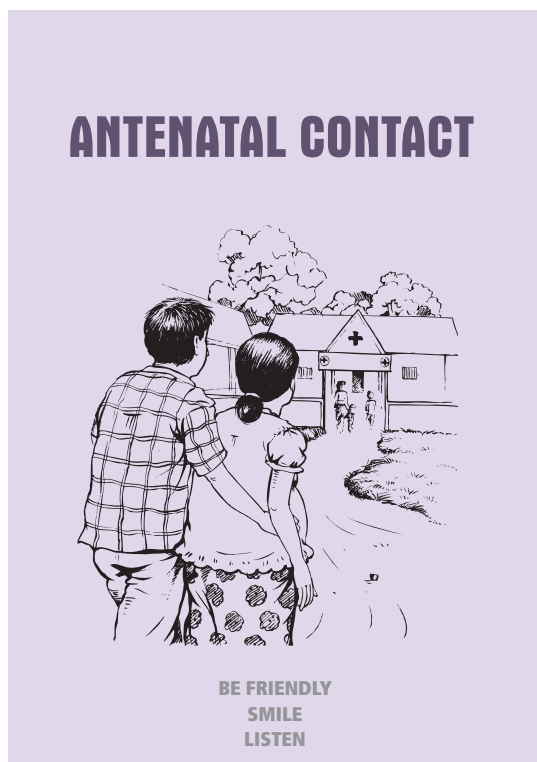


# NOTES:

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Facilitators slides and notes

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# ANTENATAL JOB AID



01

First, conduct a rapid assessment for emergency signs:

- Airway and breathing
- Shock – cold moist skin, weak fast pulse > 110 per minute, blood pressure systolic < 90mmhg
- Vaginal bleeding
- Convulsions or unconscious
- Severe abdominal pain
- High fever >38 centigrade

Give appropriate emergency treatment as per national protocols and refer urgently to hospital

02

ask for Mother card  
check information on Mother card  
if no Mother card, provide one and fill out

03

At each visit:

- Greet the woman and introduce yourself
- Ask the woman how she is feeling – “Do you have any concerns?”
- Check duration of pregnancy – fundal palpation
- Ask the woman - Where do you plan to deliver? – Explain the importance of delivering at a health facility with a skilled birth attendant
- Ask - any vaginal bleeding since last visit?
- Ask have you felt the baby moving?
- Listen for fetal heart (after 6 months of pregnancy)
- Check for eclampsia – measure blood pressure in sitting position. If diastolic pressure is 90mmhg or more repeat after one hour of rest. Ask woman if she has severe headache, blurred vision or epigastric pain. If after one hour diastolic BP is still over 90mmhg – refer to hospital
- Check for anaemia – look for conjunctival and palmar pallor, if anaemic give treatment as per national guidelines below
- Check for signs of vitamin A deficiency (ask about night blindness) and treat as per guidelines below

## **A pregnant woman needs:**

- ▶ An adequate nutritious diet
- ▶ Adequate rest during last trimester
- ▶ Iron and Folic Acid tablets 90 tablets during the pregnancy
- ▶ Tetanus Immunization

## **Increase food intake.**

- ▶ Rice, pulses and legumes, leafy vegetables,
- ▶ Include green leafy vegetables in daily diet right from the beginning.
- ▶ Consume seasonal fruit daily.
- ▶ Egg, meat, fish are important
- ▶ Iodised salt should be consumed as pregnant women requires sufficient iodine for brain development of the child in the womb.
- ▶ Take plenty of fluids/water.
- ▶ Take small and frequent meals.

## **Rest**

- ▶ Heavy work should be avoided throughout the pregnancy
- ▶ Rest (in lying down position) during third trimester is important to enable adequate flow of nutrients from mother to the child

## **A woman should gain 10-12kg weight during pregnancy**

- ▶ Iron and Folic Acid tablets
- ▶ IFA tablets should be consumed throughout the pregnancy
- ▶ Iron tablets may cause black stools which is harmless
- ▶ Iron and folic acid tablets prevent anaemia and helps a women to deliver a normal healthy baby

Immunisation of the pregnant woman with tetanus toxoid (TT)

# ANTENATAL JOB AID

04

**Treat anaemia and vitamin a deficiency as per guidelines**

anaemia signs		vitamin a deficiency signs		
Some palmar pallor	Severe palmar pallor Under 36 weeks of pregnancy	Severe palmar pallor 36 weeks and over of pregnancy	Severe signs of acute xerophthalmia (corneal lesion)	Night blindness Congenital cataract Bitot's spots
<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>
1 tablet a2 times a day (morning and afternoon) IronFolate per day for 14 days	1 tablet a2 times a day (morning and afternoon) IronFolate per day for 3 months	<b>Do not give iron!</b> Refer urgently to hospital	<b>Day 1:</b> 200,000 IU -and refer to specialist hospital Note on hospital referral note that one dose of vitamin A has been given.	1 dose 10,000 IU a day for 30 days. If not available: 2 multivitamin tablets a day for 30 days

1 dose or tablet of IronFolate contains 60mg Iron and 400 µg Folic Acid

05

**Counsel on nutrition**



- Eat 1 extra meal a day –( four meals a day during pregnancy)  
A woman should gain at least 7kgs during pregnancy
- Eat a variety of foods such as fish, liver, meat, beans, vegetables, fruit, bean curd and oils



Start breastfeeding within the first hour of birth (Immediate breast feeding) Breastfeed exclusively for the first 6 months (Exclusive breast feeding) Start complementary feeding from 6 months of age.

Continue breastfeeding until the child is at least 2 years and beyond.

06

**counsel on self care during pregnancy**



- Attend antenatal care at least 4 times during pregnancy
  - Rest more frequently and avoid lifting heavy objects
  - Sleep under a insecticide impregnated bed net
  - Avoid smoking and alcohol
  - DON'T take any medication except that prescribed at the health facility

07

**promote hiv and sti screening**

If the pregnant woman is not yet tested for HIV and STI refer to HCRH or NGO who provides testing. Also promote HIV testing for partner.

08

**help the women to prepare a birth and emergency plan.**

**1. Explain why birth in a health facility is recommended:**  
A health facility has trained staff and supplies, and a referral system in case of an emergency

**2. Discuss how she will travel to health facility and how much transport will cost**

**3. Advise her on signs of labour**

Always go to health facility if any of the following signs

- Bloody sticky discharge
- Painful contractions every 20 minutes
- Waters have broken

**4. Advise on danger signs –Must go to health facility immediately if:**

- Vaginal bleeding
- Severe headache with blurred vision
- Convulsions
- Swelling of face and fingers
- High fever > 38 centigrade
- Severe abdominal pain
- Fast or difficult breathing



# NOTES:

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Facilitators slides and notes

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# ANTENATAL JOB AID

09

If in third trimester of pregnancy counsel on birth spacing methods after delivery



- Short term methods (LAM=Lactational amenorrhea method)
- Standard daily Contraceptive Pill method
- Injectables,
- Condoms
- Long term methods (IUD= intra-uterine device, norplant)
- Permanent methods (male and female voluntary surgical contraception)

10

Promote HIV and STI screening

Check if the pregnant woman had previous TT immunizations. Decide which dose should be given. If all doses have been given in the past, DO NOT PROVIDE AGAIN.

1st dose during 1st contact  
2nd dose at least 1 month after 1st  
3rd dose at least 6 months after 2nd  
4th dose at least 1 yr after 3rd  
5th dose at least 1 yr after 4th dose



11

provide iron/folate tablets



contact	dose	number of tablets
1 <sup>st</sup> contact	1 tablet of Iron/Folate daily	60
2 <sup>nd</sup> contact	1 tablet of Iron/Folate daily	30

1 dose of tablet of Iron/Folate contains 60mg Iron and 400 µg Folic Acid

- Explain side effects: black stools, discomfort, nausea, diarrhoea or constipation
- Explain that these side effects are not dangerous, advise to take the tablets with meals or at bedtime
- Explain about foods rich in iron

12

provide Mebendazole



1 dose (=500 mg) Mebendazole. ONLY after first 3 months of pregnancy and only if not received a dose within last six months

13

Fill out Mother card  
Fill out HC record book

14

Negotiate return visits



- Come to HC or referral hospital for antenatal care 4 times during pregnancy.
- Receive additional 30 tablets Iron/Folate during second contact
- If TT immunization is not complete remind mother to come back at the appropriate date
- If any problem come to health centre immediately
- Come to HC or referral hospital for delivery
- Come to HC or referral hospital for post partum check as soon as possible after delivery.
- Remind woman to bring Mother Card to each health care visit.

# NOTES:

**Slide 187 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# DISCUSSION QUESTIONS

- Why are nutrition questions usually left out?
- What are the difficulties integrating nutrition messages in the contacts?
- What are common problems?
- What might be solutions for the problems?



# NOTES:

Slide 188 : MPA Module 10 Nutrition  
Facilitators slides and notes



# OBJECTIVES OF DAY 7

- To practise antenatal counselling skills
- To teach the delivery and post natal visit activities to the participants
- To train the immunization and child visit activities in practice ( field visit)

# NOTES:

**Slide 189** : MPA Module 10 Nutrition  
Facilitators slides and notes



# SKILLS OBJECTIVES OF DAY 7

**At the end of the day, participants are able to:**

- 1.** Counsel pregnant women adequately on nutrition during an antenatal contact, using the antenatal contact job aid
- 2.** Use the delivery and post natal contact job aids

# NOTES:

Slide 190 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# DELIVERY JOB AID

**DELIVERY CONTACT  
MOTHER**



**BE FRIENDLY  
SMILE  
LISTEN**

**01**

**First, conduct a rapid assessment for emergency signs:**

- Airway and breathing
- Shock – cold moist skin, weak fast pulse > 110 per minute, blood pressure systolic < 90mmhg
- Vaginal bleeding
- Convulsions or unconscious
- Severe abdominal pain
- High fever >38 centigrade

**Give appropriate emergency treatment as per national protocols and refer urgently to hospital**

**02**

**Greet the woman and introduce yourself check information on Mother card . If no Mother card provide one and fill out**

**03**

**Evaluate the woman in labour or with ruptured membranes**

**History of this labour:**

- When did contractions begin?
- How frequent and strong are contractions?
- Have waters broken? What colour – green or clear?
- Have you had any bleeding?
- Is the baby moving?
- Receiving any medicines?
- Do you have any concerns?

**Physical exam:**

- Check for anaemia- palmar pallor
- Check blood pressure/temperature
- Feel abdomen for contractions/ frequency/duration
- Check fetal presentation – head/breech/other?
- Is there more than one fetus?
- Listen to fetal heart beat
- If no bleeding perform vaginal exam, decide stage of labor

# NOTES:

**Slide 191 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# DELIVERY JOB AID

04

**If obstetric problem give appropriate emergency treatment as per national protocols, refer urgently to referral hospital**

**If woman is in normal labour with no problems she can deliver at the health center**

- Monitor labour using the partograph and prepare for delivery as per national guidelines
- Give supportive care throughout labour
- Use active management of the 3rd stage of labor using oxytocin
- Monitor condition of mother and baby after delivery as per national guidelines

05

**Provide care for newborn as per national guidelines**

- Thoroughly dry the baby immediately ( no washing)
- Assess colour and breathing.

If baby not breathing, clamp and cut cord and wrap, start resuscitation as per national guidelines

- If good condition place baby on mother's chest for skin-to-skin contact with the mother and cover both with blanket. Or wrap baby in a clean blanket
- Put the baby to the breast immediately after birth, within the first hour, even before the placenta has been expelled
- Explain to the mother about the benefits of colostrum
- Clamp and cut cord, keep dry and expose to the air, do not bandage
- Weigh the baby
- If the baby is very small ( below 2.5 kgs) advise mother about frequent breastfeeding every 2- 3hrs, and teach the mother how to keep the baby warm including (skin to skin contact)
- Give eye prophylaxis as national guidelines.
- Give immunisations as national guidelines – BCG/HBO
- Record on child health card

06

**Counsel mother and family on breastfeeding**



Good attachment

**Signs of good positioning and attachment**

- Mother relaxed and comfortable
- Baby's body close, facing breast
- Baby's head and body straight
- Baby's chin touching breast
- Baby's bottom supported
- Baby's mouth wide open
- Baby's lower lip turned outwards
- Baby's tongue cupped around breast
- Baby's cheeks round
- More areola above baby's mouth
- Slow deep sucks, bursts with pauses
- Can see or hear swallowing
- Baby will release breast spontaneously
- Baby appears relaxed and sleepy

**Start breastfeeding within the first hour of birth (immediate breast feeding) Breastfeed exclusively for the first 6 months (Explain exclusive breast feeding)**

07

**Counsel on nutrition**



- Advise mothers to eat 1 extra meal a day - should eat a total of four meals per day during the time she is breast feeding her baby
- Advise mother to use iodized salt in all family foods

08

**Check Tetanus (TT) status of the mother**

Check if the mother had previous TT immunizations. Decide which dose should be given.

If all doses have been given in the past, **DO NOT PROVIDE AGAIN.**

- 1<sup>st</sup> dose during 1<sup>st</sup> contact
- 2<sup>nd</sup> dose at least 1 month after 1<sup>st</sup>
- 3<sup>rd</sup> dose at least 6 months after 2<sup>nd</sup>
- 4<sup>th</sup> dose at least 1 yr after 3<sup>rd</sup>
- 5<sup>th</sup> dose at least 1 yr after 4<sup>th</sup> dose





# NOTES:

Slide 192 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# DELIVERY JOB AID

09

Provide vitamin A capsule  
to mother



- 1 VAC 200,000 IU at delivery or within the first six weeks after delivery
- Explain that Vitamin A is important for mother and baby's health. The baby will receive vitamin A in the mothers breast milk

10

Provide Iron/Folate tablets to mother



- 42 tablets as soon as possible after delivery  
Explain that the mother should take 1 tablet every day  
(1 tablet of Iron/Folate contains 60 mgs Iron and 400 µg Folate)
- Explain side effects: black stools, discomfort, nausea, diarrhoea or constipation
  - Explain that these side effects are not dangerous, advise to take the tablets with meals or at bedtime
  - Explain the importance of eating nutritious iron rich foods

11

Provide Mebendazole to mother



1 dose (=500 mgs) as soon as possible after delivery

12

Fill out Mother card  
Fill out hc record book

13

Negotiate return visit  
within the first six weeks of delivery

- If you or your child are sick return to health center
- Remind mother to bring both mother and child health cards to each health care visit
- Explain about the importance of vitamin A supplementation beginning when the child is 6 months old. Children 6- 59 months should receive vitamin A every six months around May and November.

# NOTES:

**Slide 193** : MPA Module 10 Nutrition  
Facilitators slides and notes



# POST PARTUM JOB AID

## POST PARTUM CONTACT



BE FRIENDLY  
SMILE  
LISTEN

01

**Welcome mother and introduce yourself**  
Ask for Mother card check information on mother card (including delivery details)

02

**Evaluate mothers' health by asking her the following questions:**

- How do you feel?
- Do you have any concerns?
- Do you have any pain or fever?
- How is your baby?
- How do your breasts feel?

**Check mothers health as per national protocol**

- Check blood pressure
- Check temperature
- Check uterus
- Check breasts
- Check genital area - swelling/pus
- Check vaginal bleeding or lochia
- Check urine /stool
- Check for anaemia –conjunctival or palmer pallor
- Check for Vitamin A deficiency signs – night blindness, eye problems

**Treat as necessary using the national protocol below:**

Anaemia signs		Vitamin A deficiency signs	
Some palmar pallor	Severe palmar pallor	Any signs of active xerophthalmia (corneal lesion)	Night blindness Conjunctival xerosis Bitot's spots
<b>Treatment</b> 1 tablet x 2 times per day (morning and evening) of Iro	<b>Treatment</b> 1 tablet x 2 times per day (morning and evening) of Iron/folate for 3 months	<b>Treatment</b> Day 1: 200,000 IU and refer	<b>Treatment</b> 1 dose 10,000 IU a day for 30 days. If not available: 2 multivitamin tablets a day for 30 days.

## Nutrition of Lactating Mothers

- ▶ A lactating mother requires to eat more than what she was eating during pregnancy.
- ▶ A lactating mother requires 550 calories extra per day to meet the needs of production of mother's milk for the new born baby.
- ▶ A good nutritious diet prepared from locally available foods, family support and care, and a pleasant atmosphere in the family helps improve lactation and ensures health of both the mother and the baby.

# POST PARTUM JOB AID

03

**Ask for child health card check information on child health card if no child health card, provide one and fill out care**



**Evaluate new born health as per national guidelines**

Ask the mother if she has any concerns about her baby

- Assess baby's general condition
- Check weight
- If small baby (below 2.5kgs - low birth weight) encourage the mother to breast feed every 2-3 hours
- Teach the mother how to keep the baby warm (skin to skin contact)

04

**Observe, evaluate and counsel on breastfeeding**



Show mother how to support baby's body correctly  
Check for good attachment and help as necessary



Good attachment

**Signs of good positioning and attachment (if younger than 6 months)**

- Mother relaxed and comfortable
- Baby's body close, facing breast
- Baby's head and body straight
- Baby's chin touching breast
- Baby's bottom supported
- Baby's mouth wide open
- Baby's lower lip turned outwards
- Baby's tongue cupped around breast
- Baby's cheeks round
- More areola above baby's mouth
- Slow deep sucks, bursts with pauses
- Can see or hear swallowing
- Baby will release breast spontaneously
- Baby appears relaxed and sleepy

Experienced difficulty	Counseling messages
Experienced difficulties	Feed baby every 2-3 hours. Drink at least 2 litres of water per day. Eat an extra meal per day and extra nutritious snacks such as fruits
Engorgement	Apply clean warm cloth for 5 minutes before each breast feed. If baby difficult to attach to breast express gentle some milk before feeding. Breastfeed every 2-3 hours, express remaining milk after feeds.
Sore or cracked nipples	Keep clean and dry between feeds. Begin feeding on least sore breast. At the end of feed remove baby gently from the breast.
Inverted nipple(s)	Use empty barrel of syringe to pull out the nipples before breastfeeding

**Counsel on continuous breastfeeding**

- Breastfeed exclusively for the first 6 months (Exclusive breast feeding)
- Start complementary feeding from 6 months of age.
- Continue breastfeeding until the child is at least 2 years old and beyond.



If mother asks questions refer to complementary feeding page in this job aid.

05

**Check baby and mother for danger signs and refer to health facility if any danger signs**

**Danger signs in baby:**

- Difficulty breathing,
- Convulsions
- Fever
- Diarrhoea
- Feels cold
- Very small
- Not feeding at all

**Refer to hospital immediately**

**Danger signs in mother:**

- Excessive vaginal bleeding
- Convulsions
- Fast or difficult breathing
- Fever
- Severe abdominal pain

**Refer to hospital immediately**

# NOTES:

Slide 195 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# POST PARTUM JOB AID

06

## Advise on self care and hygiene

- Advise the mother to have enough rest and sleep
- Hygiene – bath daily to prevent infection
- Wash genital area after toilet
- Wash hands before handling baby

07

## Counsel on nutrition



- Advise mother to eat 1 extra meal a day if breastfeeding, and drink plenty of fluids, at least 2 litres per day. Advise against food taboos

Use iodized salt for the whole family

08

## Check tetanus (TT) status of the mother

Check if the mother had previous TT immunizations. Decide which dose should be given. If all doses have been given in the past, **DO NOT PROVIDE AGAIN**.

- 1<sup>st</sup> dose during 1<sup>st</sup> contact
- 2<sup>nd</sup> dose at least 1 month after 1<sup>st</sup>
- 3<sup>rd</sup> dose at least 6 months after 2<sup>nd</sup>
- 4<sup>th</sup> dose at least 1 yr after 3<sup>rd</sup>
- 5<sup>th</sup> dose at least 1 yr after 4<sup>th</sup> dose



09

## Check immunization status of the child

Provide if necessary, use the table below

Anemia signs		Vitamin A deficiency
Babies at birth	BCG - Single dose Hb0 - Single dose	BCG can be provided up until one year after birth, not when signs of HIV Hb0 should be provided 24 hours after birth, but may be given under 7 days
Children after 6 weeks until 1 year	OPV, DPT OR DPT-HB 1st dose 6 weeks after birth 2nd dose at least 4 weeks after 1st dose 3rd dose at least 4 weeks after 2nd dose	Do not miss any immunization dates. Immunizations will not work if missed. For DPT-HB do not immunize when a child is VERY sick with high fever >38.5 C Do not give DPT/DPT-HB when hypersensitivity is known. Record immunizations on Child Health Card and in HC records.
	Measles 1 (single dose) at least 9 months after birth	

10

## Check immunization status of the child

If not, provide mother 1 VAC 200,000 IU within 6 weeks of delivery

11

## Provide Iron/Folate Tablets to mother




- 42 tablets at 1st post partum contact IF she did not receive 42 tablets at delivery
- Take 1 tablet every day
- Explain side effects: black stools, discomfort, nausea, diarrhoea or constipation
- Explain that these side effects are not dangerous, advise to take the tablets with meals or at bedtime
- Advise about iron rich foods

(1 tablet of Iron/Folate contains 60 mgs Iron and 400 µg Folate)



# NOTES:

Slide 196 : MPA Module 10 Nutrition  
Facilitators slides and notes



# POST PARTUM JOB AID

12

Provide Mebendazole to mother



If mother did not receive at delivery, provide 1 dose (=500 mg) Mebendazole

13

Counsel on HIV testing

- Check HIV testing status
- If not tested, counsel on HIV testing
- Encourage partner testing
- Provide information on nearest testing services

14

Counsel on birth spacing methods after delivery



Explain that if mother has sex and is not exclusively breast feeding she can become pregnant as soon as 4 weeks after delivery. Discuss woman's plan about child spacing and advise 2-3 year gap between pregnancies. Advise woman about LAM. Counsel on other family planning methods either to use alone or together with LAM. Advise on where she can obtain services and counsel.

- Short term methods (LAM=Lactational amenorrhea method)  
A mother who is exclusively breastfeeding during the child's first six months is usually protected from pregnancy as she is unlikely to ovulate )
- Standard daily contraceptive pill method
- Injectables,
- Condoms
- Long term methods (IUD= intra-uterine device, Norplant
- Permanent methods (male and female voluntary surgical contraception)

15

Fill out Mother card  
Fill out child health card  
Fill out HC record book

16

Fill out Mother card



- Post partum women should receive post partum care within 24 hours; 2-3 days and 6 weeks
- Remind about immunisation schedule 6,10,14 weeks
- Return immediately if you or your baby is sick
- Remind mother to bring Child Health Card to each health care visit

Remind about the importance of the child receiving Vitamin A supplementation twice per year (around May and November) when the child is 6 – 59 months, either in the village or at HC

'Vitamin A Saves Children's Lives'

# NOTES:

Slide 197 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# OBJECTIVES OF DAY 8

- To practise delivery and postnatal visit counselling skills
- To teach the immunization and child visit activities to the participants
- To train the immunization and child visit activities to the participants ( field visit)

# NOTES:

**Slide 198 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# SKILLS OBJECTIVES OF DAY 8

**At the end of the day, participants are able to:**

- 1.** Counsel women adequately on nutrition during delivery and post partum contacts, using the job aids
- 2.** Use the immunization and child visit contact job aids

# NOTES:

**Slide 199 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# IMMUNIZATION JOB AID

## IMMUNIZATION CONTACT



**BE FRIENDLY  
SMILE  
LISTEN**

**01**

Ask for child health card  
Ask for Mother card, check information on cards

**02**

Check immunization status of the child

**Provide if necessary, use the table below**

Target group	Dose	Notes
Babies at birth	<b>BCG</b> - Single dose <b>HbD</b> - Single dose	<b>BCG</b> can be provided up until one year after birth, not when signs of HIV are present. <b>HbD</b> should be provided 24 hours after birth, but may be given under 7 days.
Children after 6 weeks until 1 year	<b>OPV, DPT OR DPT-HB</b> 1 <sup>st</sup> dose 6 weeks after birth 2 <sup>nd</sup> dose at least 4 weeks after 1 <sup>st</sup> dose 3 <sup>rd</sup> dose at least 4 weeks after 2 <sup>nd</sup> dose <b>Measles</b> 1 (single dose) at least 9 months after birth	Do not miss any immunization dates. Immunizations will not work if missed. For <b>DPT-HB</b> do not immunize when a child is VERY sick with high fever >38.5 C Do not give <b>DPT-HB</b> when hypersensitivity is known. Record immunizations on Child Health Card and in HC records.

**03**

Check tetanus (TT) status of the mother

Check if the mother had previous TT immunizations. Decide which dose should be given. If all doses have been given in the past, **DO NOT PROVIDE AGAIN.**

1<sup>st</sup> dose during 1<sup>st</sup> contact  
2<sup>nd</sup> dose at least 1 month after 1<sup>st</sup>  
3<sup>rd</sup> dose at least 6 months after 2<sup>nd</sup>  
4<sup>th</sup> dose at least 1 yr after 3<sup>rd</sup>  
5<sup>th</sup> dose at least 1 yr after 4<sup>th</sup> dose

1	2	3	4	5
First contact	1 month after 1 <sup>st</sup>	6 months after 2 <sup>nd</sup>	1 year after 3 <sup>rd</sup>	1 year after 4 <sup>th</sup>



# NOTES:

**Slide 200 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# IMMUNIZATION JOB AID

04

## Evaluate child's health Ask mother if she has any concerns for her child?

- Evaluate child's health – if any problems treat according to the Integrated Management of Childhood illnesses (IMCI) protocols and refer if necessary
- Check child's age in completed weeks, months, years
- Check length/height (if equipment is available)
- Check weight
- If small baby ( below 2.5kgs - low birth weight) encourage mother to provide breast feeding every 2-3 hours

### Teach the mother how to keep the baby warm – skin to skin contact

- Evaluate weight based on Child Health Card ( Yellow Card)
- Explain the child's weight to the mother and counsel accordingly. Important, if severely malnourished (oedema, wasting) refer to nearest referral hospital for treatment
- Check for anaemia – treat as per national guidelines (attached at the end of this job aid)
- Check for signs of vitamin A deficiency – treat as per national guidelines (attached at the end of this job aid)

05

## Evaluate mothers' health



### Ask if she has any concerns -

- Weight
- Check blood pressure
- Check for signs of anaemia – palmar pallor
- Check for signs of Vitamin A deficiency/night blindness
- Advise her about importance of nutritious diet ( four meals per day while mother is still breastfeeding)

## Treat Anaemia and Vitamin A Deficiency as per Guidelines

Anaemia signs		Vitamin A deficiency signs	
Some palmar pallor	Severe palmar pallor Under 36 weeks of pregnancy	Severe palmar pallor 36 weeks and over of pregnancy	Severe signs of active xerophthalmia (corneal lesion) Conjunctival xerosis Bitot's spots
<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>	<b>Treatment</b>
1 Iron Folate tablet x 2 times a day (morning and afternoon) for 14 days	1 tablet Iron Folate x 2 times a day (morning and afternoon) for 3 months Follow up every two weeks	Do not give iron! Refer urgently to hospital	Day 1: 200,000 IU - send refer to specialist hospital Note on hospital referral note that one dose of vitamin A has been given. 1 dose 10,000 IU a day for 30 days. If not available: 2 multivitamin tablets a day for 30 days

1 dose of tablet of Iron/Folate contains 60mg Iron and 400 µg Folic Acid

06

## Evaluate and counsel on breastfeeding



Good attachment

### Signs of good positioning and attachment (if younger than 6 months)

- Mother relaxed and comfortable
- Baby's body close, facing breast
- Baby's head and body straight
- Baby's chin touching breast
- Baby's bottom supported
- Baby's mouth wide open
- Baby's lower lip turned outwards
- Baby's tongue cupped around
- Baby's cheeks round
- More areola above baby's mouth
- Slow deep sucks, bursts with pauses
- Can see or hear swallowing
- Baby will release breast spontaneously
- Baby appears relaxed and sleepy

Experienced difficulty	Counseling messages
Insufficient milk	Feed baby every 2-3 hours. Drink at least 2 litres of water per day. Eat an extra meal per day and extra nutritious snacks such as fruits
Engorgement	Apply clean warm cloth for 5 minutes before each breast feed. If baby difficult to attach to breast express gently some milk before feeding. Breastfeed every 2-3 hours, express remaining milk after feeds
Sore or cracked nipples	Keep clean and dry between feeds. Begin feeding on least sore breast. At the end of feed remove baby gently from the breast
Inverted nipple(s)	Use syringe to pull out the nipples before breastfeeding

# NOTES:

Slide 201 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# IMMUNIZATION JOB AID

## Counsel on continuous breastfeeding

- Breastfeed exclusively for the first 6 months (Exclusive breast feeding)
- Start complementary feeding from 6 months of age
- Continue breastfeeding until the child is at least 2 years old and beyond.



Refer to complementary feeding page in this job aid.

07

### Check if mother received vitamin a after delivery or post partum contacts

If not, provide mother 1 VAC 200,000 IU (Only within 6 weeks after delivery)

08

### Check if mother received iron/folate tablets during delivery or post partum contacts

- If not, provide mother with 42 tablets

Take 1 tablet every day (1 tablet contains 60 mgs Iron and 400 µg Folate)

- Explain side effects: black stools, discomfort, nausea, diarrhoea or constipation
- Explain that these side effects are not dangerous, advise to take the tablets with meals or at bedtime
- Advise about nutritious diet with iron rich foods

09

### Check if mother received iron/folate tablets during delivery or post partum contacts

- If not, provide mother with 1 dose (=500 mg) Mebendazole

10

Fill out Mother card  
Fill out child health card  
Fill out HC record book

11

### Negotiate return visit



- When you or your child are sick
  - Remind mother to bring Child Health Card to every health visit

Remind about the importance of Vitamin A supplementation twice per year (around May and November) when the child is aged 6-59 months.

'Vitamin A Saves Children's Lives'



### Referral for Treatment of Severe Vitamin A Deficiency Eye Disease

Province	Name of Hospital
Phnom Penh	Angkor Hospital (Street 110 Phnom Penh)
Kandal	Chey Chum Neas Hospital Takmoh District
Siem Reap	Angkor Children's Hospital
Takeo	Provincial Hospital

# NOTES:

Slide 202 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# IMMUNIZATION JOB AID

**When an infant is 6 months old give complementary food. Add a variety of foods to thick rice porridge. Feed frequently according to the infants age and continue breast feeding**

<b>6 months</b> 			
<b>7 - 8 months</b> 			
<b>9 -11 months</b> 			
<b>12 months and above</b> 			

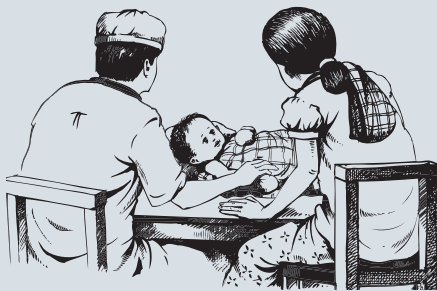
# NOTES:

**Slide 203** : MPA Module 10 Nutrition  
Facilitators slides and notes



# WELL AND SICK CHILD JOB AID

## WELL AND SICK CHILD CONTACT



BE FRIENDLY  
SMILE  
LISTEN

01

Ask for Child Health Card  
check information on Child Health Card

02

Ask the mother if she has any  
concerns for her child

**Ask the mother if she has any concerns for her child**

- Evaluate child's health – if any problems treat according to the Integrated Management of Childhood Illnesses (IMCI) protocols and refer if necessary
- Check child's age in completed weeks, months, years
- Check length/height ( if equipment available)
- Check weight
- If small baby ( below 2.5kgs - low birth weight) encourage mother to provide breast feeding every 2- 3 hours  
Teach the mother how to keep the baby warm – skin to skin contact
- Evaluate weight based on Child Health Card ( Yellow Card)
- Explain the child's weight to the mother and counsel accordingly. Important, if severely malnourished (oedema, wasting) refer to nearest referral hospital for treatment

03

Check for deficiency signs

- Check for anaemia ( palmar pallor) and treat if anaemic using the IMCI guidelines
- Check for vitamin A deficiency and treat if necessary  
Treat according to the National Guidelines for Vitamin A Refer if necessary



# NOTES:

Slide 204 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# WELL AND SICK CHILD JOB AID

Vitamin A and Anemia Treatment Table for Children

Symptoms/illness	Age / group	Dose	
<b>Persistent diarrhoea / Severe malnutrition</b>	0-5 months	Vitamin A 50,000 IU : (1 dose)	
	6-11 months	Vitamin A 100,000 IU : (1 dose)	
	1-12 years	Vitamin A 200,000 IU : (1 dose)	
<b>Vitamin A Deficiency</b> Signs: • Night blindness • Conjunctival xerosis • Bitot's spot	0-5 months	Vitamin A 1st day 1 dose 50,000 IU Vitamin A 2nd day 1 dose 50,000 IU Vitamin A 14th day 1 dose 50,000 IU	
	6-11 months	Vitamin A 1st day 1 dose 100,000 IU Vitamin A 2nd day 1 dose 100,000 IU Vitamin A 14th day 1 dose 100,000 IU	
	1-12 years	Vitamin A 1st day 1 dose 200,000 IU Vitamin A 2nd day 1 dose 200,000 IU Vitamin A 14th day 1 dose 200,000 IU	
	<b>Anemia</b> Severe palmar pallor	1-12 years Do not give Iron, refer urgently to hospital.	
	Some palmar pallor	4-12 months (6- < 10kg)	Iron folate tablet ½ dose a day for 14 days. Reassess after treatment (1 tablet contains 60mg of iron and 400µg of folic acid)
		1-5 years (10-19 kg)	Iron folate tablet ½ dose a day for 14 days. Reassess after treatment

04

evaluate and counsel on breastfeeding check for good attachment if baby less than 6 months



**Signs of good positioning and attachment**

- Mother relaxed and comfortable
- Baby's tongue cupped around breast
- Baby's body close, facing breast
- Baby's cheeks round
- Baby's head and body straight
- More areola above baby's mouth
- Baby's chin touching breast
- Slow deep sucks, bursts with pauses
- Baby's bottom supported
- Can see or hear swallowing
- Baby's mouth wide open
- Baby will release breast spontaneously
- Baby's lower lip turned outwards
- Baby appears relaxed and sleepy



Good attachment

Ask if mother has any breast feeding difficulties and counsel accordingly:

experienced difficulty	counselling message
Insufficient milk	Feed baby every 2-3 hours. Drink at least 2 liters of water per day. Eat an extra meal per day and extra nutritious snacks such as fruits.
Engorgement	Apply clean warm cloth for 5 minutes before each breast feed. If baby difficult to attach to breast express gently some milk before feeding. Breastfeed every 2-3 hours, express remaining milk after feeds.
Sore or cracked nipples	Keep clean and dry between feeds. Begin feeding on least sore breast. At the end of feed remove baby gently from the breast.
Inverted nipple(s)	Use syringe to pull out the nipples before breastfeeding.

**Counsel on continuous breastfeeding**

- Breastfeed exclusively for the first 6 months (Exclusive breast feeding)
- Start complementary feeding from 6 months of age.
- Continue breastfeeding until the child is at least 2 years old and beyond.



Refer to complementary feeding page on back page of this job aid.

05

check immunization status of the child

Provide if necessary, use the table below

Target group	Dose	NOTES
Babies at birth	BCG - Single dose HbO - Single dose	BCG can be provided up until one year after birth, not when signs of HIV. HbO should be provided 24 hours after birth, but may be given under 7 days.
Children after 6 weeks until 1 year	OPV, DPT OR DPTfHB 1st dose 6 weeks after birth 2nd dose at least 4 weeks after 1st dose 3rd dose at least 4 weeks after 2nd dose Measles 1 (single dose) At least 9 months after birth	Do not miss any immunization dates. Immunizations will not work if missed. For DPTfHB do not immunize when a child is VERY sick with high fever >38.5 C. Do not give DPTfHB when hypersensitivity is known. Record immunizations on Child Health Card and in HC records.

# NOTES:

**Slide 205 : MPA Module 10 Nutrition**  
Facilitators slides and notes

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# WELL AND SICK CHILD JOB AID

06

provide Mebendazole if child is 12 months or over and did not get deworming in the previous six months

AGE GROUP	MEBENDAZOLE
12-23 months	½ tablet (=250mg)
24 months and over	1 tablet (=500mg)

07

Fill out child health card  
Fill out hc record book

08

Negotiate return visit



- Come to HC for follow up visit ( remind caregiver of date of next visit)
- Come when you or your child feel sick
- Remind mother to bring Child Health Card to each health care visit

Remind about the importance of Vitamin A supplementation twice per year (around May and November) when the child is aged 6-59 months, either in the village or at HC.  
‘Vitamin A Saves Children’s lives’



## Feeding Sick Children

When children are sick they often lose their appetite. This is difficult, because they need the nutrients in the food to help them recover.

### 0- 6 months

- Advise mother that sick infants less than six months of age should receive more frequent breastfeeding during episodes of illness, and for 2 weeks after illness during the recovery period.
- If an infant with diarrhea shows signs of dehydration (sunken eyes, dry lips and tongue, and not passing urine), the infant should be referred immediately for to the closest health center or hospital for treatment. Mothers and health care volunteers in the community should be educated to recognize signs of dehydration.



### Children 6-59 months of age

- Sick children 6-59 months of age should increase their fluid intake, including more frequent breastfeeding than usual, during episodes of illness, and for 2 weeks after the illness during the recovery period
- Caregivers should encourage the sick child to eat soft, varied, appetizing favorite foods. Give smaller amounts but more often, 5- 6 smaller meals. They should eat a variety of foods. Fruit, vegetables and animal products will help them to get better faster.
- After illness, children should be given one extra meal per day for at least 2 weeks (recovery period).
- Mothers and health care volunteers in the community should be educated on how to prepare and administer oral rehydration therapy to children with diarrhea.
- If a child with severe diarrhea shows signs of dehydration (sunken eyes, dry lips and tongue, and not passing urine), the child should be referred immediately to the closest health center or hospital for medical treatment.

# NOTES:

Slide 206 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# OBJECTIVES OF DAY 9

- To practise all contacts counselling skills
- To teach the VAC distribution activities to the participants
- To teach how to calculate target group estimates, identify gaps and solve issues for coverage and stock

# NOTES:

Slide 207 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# SKILLS OBJECTIVES OF DAY 9

**At the end of the day, participants are able to:**

- 1.** Counsel women adequately on nutrition during all contacts, using the job aids
- 2.** Use the coverage, stock and gap calculation job aid
- 3.** Identify solutions for coverage and stocks gaps




# NOTES:

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# VITAMIN A JOB AID

## VITAMIN A DISTRIBUTION ROUND



**VITAMIN A SAVES  
CHILDREN'S LIVES**





**BE FRIENDLY  
SMILE  
LISTEN**

01

Ask for Child Health Card  
Check information on Child Health Card

02




Provide children aged 6 months – 59 months with  
VAC and mebendazole according to the table below

Target group	Dose VAC	Mebendazole
Children 6-11 months	100,000 IU 	*NO mebendazole*
Children 12-59 months	200,000 IU 	12- 23 months 1/2 tablet  (=250 mg) of Mebendazole
		24- 59 months 1 tablet  (=500 mg) of Mebendazole

*As you give the vitamin A to each child, explain to the caretaker that you are giving vitamin A and that Vitamin A Saves Children's Lives*

03

Provide post partum women with Vitamin A,  
Mebendazole and Iron folate tablets within the  
first 6 weeks after delivery

Vitamin A 	Mebendazole 	Iron folate tablets 
1 VAC (200,000 IU) to PPM within 6 weeks after delivery Visit HC if Vitamin A deficiency signs occur	Mebendazole 1 dose (500mg)	42 tablets if she did not receive at delivery Take 1 tablet a day. Explain side effects: black stools, discomfort, nausea, diarrhoea or constipation. Explain that these side effects are not dangerous, advise to take the tablets with meals or at bedtime. Advise about iron rich foods (1 tablet of Iron-folate contains 40 mg iron and 400 µg folic acid)

*Record on mother's card, tally sheet and HC record book when post partum women receives  
Vitamin A, Mebendazole and Iron folate tablets.*

# NOTES:

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# VITAMIN A JOB AID

04

## Counsel on Vitamin A rich food



### Advise the mother:

- All the family should eat foods rich in Vitamin A
- VITAMIN A SAVES CHILDREN'S LIVES BECAUSE IT PROTECTS CHILDREN FROM COMMON CHILDHOOD ILLNESSES
- Vitamin A reduces the severity of infectious illness, especially measles and chronic diarrhea.

### Vitamin A Rich Foods

- Eggs, fish, meats, and liver
- Orange/yellow colored vegetables and fruits: e.g. pumpkins, carrots, yellow/orange fleshed sweet potatoes, ripe papaya (papaw), and ripe mango
- Dark green leafy vegetables: e.g., spinach, cassava leaves, bean leaves, and pumpkin leaves



### Key Messages: VITAMIN A SAVES CHILDREN'S LIVES

Women	Infants 0 – 6 months	Infants 6–59 months
Eat Vitamin A rich foods and increase homestead food production 1 VAC (200,000 IU) to PPM within 6 wks after delivery Visit HC if Vitamin A deficiency signs occur	Immediate breast feeding within first hour of delivery Exclusive breast feeding up to 6 months Visit HC or outreach for immunizations and health care	Continue breast feeding for at least 2 years Appropriate complementary feeding from 6 months VAC + mebendazole every 6 months Visit HC if signs of Vitamin A deficiency occur or when sick

05

## Counsel on Breastfeeding and Complementary Feeding



Start complementary feeding from 6 months of age.  
Continue breastfeeding until the child is at least 2 years old and beyond



Follow the recommendations for complementary feeding on the next sheet of the Job Aid. Make sure foods from all food groups are included in the diet.


06

Fill out Child Health Card – Remind the caregiver of next Vitamin A supplementation round (around May and November of each year).  
Remind mother to bring Child Health Card to each health care visit.  
Fill out HC record book/ tally sheet if at village level



# NOTES:

**Slide 210 : MPA Module 10 Nutrition**  
Facilitators slides and notes



# HOW TO CALCULATE TARGET GROUPS FOR VITAMIN A, MEBENDAZOLE AND IRON FOLATE TABLETS

- Find the Provincial percentages for births, postpartum women under 6 weeks, children of age groups 0-1 years and 0-5 years. ( Examples of provincial percentages from Kandal province)

<b>Children</b>	0-1 year	2.4% provincial percentage
	0-5 years	11.1% provincial percentage
<b>Postpartum</b> < 6 weeks		2.6% provincial percentage

Calculate the percentage of children 6 - 11 months (for VAC 100,000 IU)

<b>Children</b>	0-1 year	2.4%
6-11 months is $\frac{1}{2}$ , so		$2.4\% / 2 = 1.2\%$

# NOTES:

Slide 211 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# HOW TO CALCULATE TARGET GROUPS FOR VITAMIN A, MEBENDAZOLE AND IRON FOLATE TABLETS

- Calculate the percentage of children 12-59 months (for VAC 200,000 IU)

**Children** 0-5 years 11.1%

**Children** 12-59 months  $11.1\% - 2.4\% = 8.7\%$

- Calculate the estimated number of children 6-11 months in a village

M/F (total population in the village) \* 1.2 / 100

M/F (total population in the village) \* 0.012 = ... ?

- Calculate the estimated number of children 12-59 months in a village

M/F (total population in the village) \* 8.7 / 100

M/F (total population in the village) \* 0.087 = ... ?



# NOTES:

Slide 212 : MPA Module 10 Nutrition  
Facilitators slides and notes

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# HOW TO CALCULATE TARGET GROUPS FOR VITAMIN A, MEBENDAZOLE AND IRON FOLATE TABLETS

- Calculate the estimated number of postpartum women <6 weeks in a village  
 $M/F \text{ (total population in the village)} * 2.6/100$   
 $M/F \text{ (total population in the village)} * 0.026 =$   
... (per 1 year)

# NOTES:

**Slide 213** : MPA Module 10 Nutrition  
Facilitators slides and notes

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# OBJECTIVES OF DAY 10

- To practise all and nutrition messages during the final field practises
- To instruct how to conduct a peer follow-up meeting
- To assess participants' learning by post test
- To evaluate the training using the short term evaluation form

# NOTES:

Slide 214 : MPA Module 10 Nutrition  
Facilitators slides and notes



# **SKILLS OBJECTIVES OF DAY 10**

**At the end of the day, participants are able to:**

- 1.** Counsel all women / caregivers with or without children about nutrition in real life settings, integrating all nutrition interventions and using the job aids
- 2.** Prepare and conduct peer follow-up meetings

# NOTES:

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# PEER FOLLOW-UP

- After 3 to 6 months
- During monthly meetings
- To discuss successes and challenges
- Find solutions



# NOTES:

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# HOW TO DO PEER FOLLOW-UP?

- Come together
- Use the Peer Follow-up table

## **Think of:**

- 1.** issues
- 2.** solutions
- 3.** who should do it?
- 4.** what can we do ourselves?

# NOTES:

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Facilitators slides and notes

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# PEER FOLLOW-UP TABLE

Challenge	What should be done	Who should do this	What else can I do?
We don't have enough materials	OD should deliver 10 packages more	OD, on our request	Make some material ourselves

# NOTES:

**Slide 218 : MPA Module 10 Nutrition**  
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