



Government of Nepal

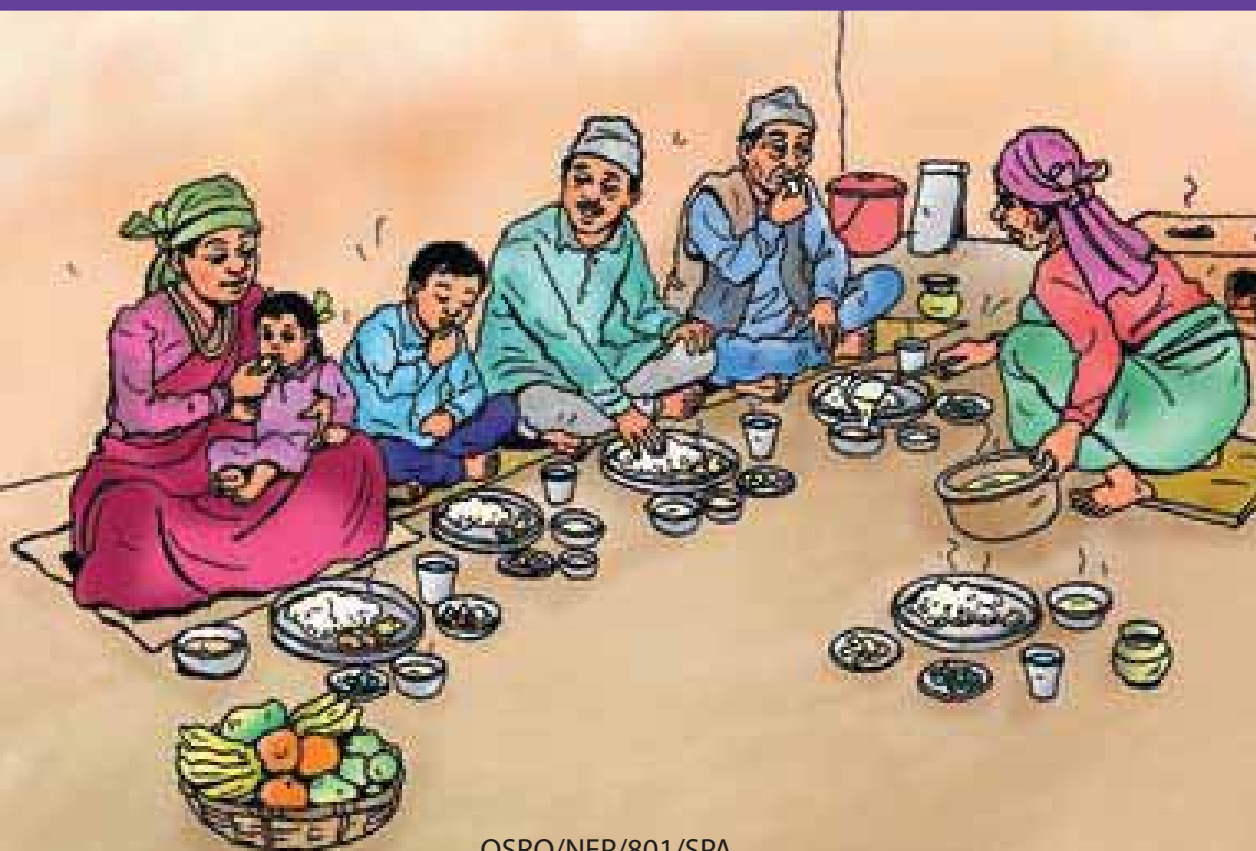


FAO Nepal



Government of Spain

Nutrition Handbook for Community Mobilisers



OSRO/NEP/801/SPA

Food and Agriculture Organization of the United Nations



Government of Nepal



FAO Nepal



Government of Spain

Nutrition Handbook for **Community Mobilisers**

OSRO/NEP/801/SPA

Food and Agriculture Organization of the United Nations

December 2009

Disclaimer

The designations employed in the presentation of the material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of similar nature that are not mentioned.

The views expressed in this publication are those of the author(s) and do not necessarily reflect the views of FAO.

All rights reserved. Reproduction and dissemination of materials in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders. Applications for such permission should be addressed to: Chief, Electronic Publishing Policy and Support Branch Communication Division, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy or by e-mail to: copyright@fao.org

FAO 2009

Acknowledgements

This Handbook was prepared in collaboration with the Nutrition and Consumer Protection Division of FAO. Expert information and guidance on nutrition were provided by Peter Glasauer and Nicole Heumann. Valuable comments and inputs were also received from Florence Egal, Chiara Deligia and Ellen Muehlhoff.. The editing of the present version was made by Jayne Baeney.

Special thanks go also to Bui Thi Lan, FAO Representative for Nepal, to Giuseppe Simeon and all colleagues from the TCES unit in Rome HQs for their constant guidance and support for the preparation of these materials.

Illustrations were made by Ekaram Maharjan. Layout design and printing have been done by the Worldwide Print Solution Company (WPS).

This handbook was produced under Project “Emergency assistance to improve food and nutrition security of vulnerable rural communities affected by internal conflict, flood and drought in Nepal”, OSRO/NEP/801/SPA and would not have been possible without the financial contribution from the Government of Spain.

Introduction

This Handbook targets all professionals engaged in the improvement of the health and nutrition status of vulnerable households in Nepal; it is specifically tailored to Community Health Workers, Agricultural and Livestock Extensions Workers, Teachers in basic and primary schools and other development agents working with families and community groups. The aim of the publication is to provide these professionals with the basic principles for the transfer of better nutrition practices, including the preparation of good, nutritious and safe meals, to families and community members.

The publication is divided among thirteen topics covering the following thematic areas: personal and household hygiene, functions of different foods with emphasis on key nutrients, recommended feeding practices for critical target groups and prevention and treatment of malnutrition among children aged less than three years.

Key messages from this Handbook have been extracted and developed in a family-oriented handbook which is being published separately.

Contents

Acknowledgements	v
Introduction	vi
Personal and household hygiene	1
Keeping food safe and clean	5
Functions of food	8
Iron makes the body strong	13
Vitamin A keeps the body healthy	16
Iodine makes the body function-properly	19
Food for pregnant and breastfeeding women	21
Feeding babies aged 0-6 months	23
Feeding young children aged over 6 months	26
Feeding school-age children and youth	29
Food and care for older people	32
Feeding sick people	34
Preventing and managing malnutrition	36

Personal and household hygiene

Fact

Good hygiene prevents diseases

- ◆ Many illnesses, especially diarrhoea, come from germs found in human and animal faeces. These germs are very small and are not visible to our eyes.
- ◆ Germs cause illness when they get into the mouth through food, water, dirty hands, dirty utensils or dirty surfaces used for preparing and serving food.
- ◆ Just rinsing fingers with water is not enough. To kill germs, both hands need to be rubbed with water and soap or ash.
- ◆ A dirty environment attracts flies, cockroaches, rats and mice which spread germs. A household needs to be kept clean to stop the spread of germs and protect all the family from illness.



Good hygiene practices that prevent the spread of germs include:

- ◆ disposing safely of all faeces, ideally using a toilet or latrine
- ◆ washing hands with soap (or ash) and clean water
- ◆ using clean water from a safe source
- ◆ disposing safely of household refuse, e.g. burning, burying, recycling, composting, etc.
- ◆ keeping animal faeces away from the house, paths, wells, streams and children's play areas.



Act

Follow good hygiene practices to prevent illness

- ◆ Only use water from a safe source. Safe water sources are water pipes, tube-wells, protected dug-wells and springs. Use clean, covered containers to collect and store water. Wash your hands before collecting water.
- ◆ Build hand washing habits in the family. Make sure that all the family, including children, wash their hands with clean water and soap (or ashes):
 - » after using the toilet
 - » after cleaning a child's bottom (or any other contact with human excreta)
 - » before handling and eating food
 - » before feeding children (make sure they wash their hands, too)
 - » after contact with sick people (e.g. feeding, washing)
 - » after touching or handling animals.
- ◆ Dry hands by shaking and rubbing them together or using a clean towel that is kept only for this purpose.
- ◆ All the family should keep their bodies clean through regular bathing and laundering. In particular, children's faces should be washed regularly and thoroughly with clean water to prevent eye infections.

Keep your house and yard clean to stop the spread of germs that carry illness

- ◆ Dispose of all faeces safely:
 - » Use a toilet or latrine and keep it clean and free of flies.
 - » Teach small children to use a potty. Put children's faeces in the latrine.
 - » If it is not possible to use a toilet or latrine, the faeces should be buried immediately. Everyone should always defecate well away from houses, paths, water sources and places where children play.
- ◆ Keep the surrounding area of the house free from animal faeces and other rubbish.
- ◆ Put rubbish in a covered bin, bury it or burn it, so it does not attract flies and other pests.



Other important tips

BE CAREFUL!

Make sure there is no water where mosquitoes can breed (e.g. ponds, containers). Outside the house, cover water barrels and turn empty containers upside down so they do not collect water.

PASS IT ON!

Train your children to practice good hygiene. For instance, show them how and when to wash hands and how to keep the environment clean. Build daily habits.

CHECK that your children's school has proper hand washing facilities and latrines.

Keeping food safe and clean

Fact

Dirty foods and drinks can cause illness

- ◆ Germs can reach our foods and drinks via dirty hands, flies or other insects, mice and other animals, and dirty utensils.
- ◆ These germs or parasites may cause food poisoning (resulting in diarrhoea and vomiting) and other sicknesses.
- ◆ The people most sensitive to food-related sickness are young children and people who are already ill.

Food must be properly stored and prepared because:

- ◆ raw meat can contain germs and worms that can be transferred to humans
- ◆ food that is eaten raw, such as fruits and vegetables, can become contaminated by dirty hands, unclean water or flies
- ◆ germs grow fast in food that is warm and wet
- ◆ food that is kept too long can go bad and contain toxic chemicals or germs that can cause sickness.

Act

Use clean and safe water

- ◆ Get water for drinking or for washing uncooked foods from a safe source, such as water pipes, tube-wells, protected dug-wells and springs.
- ◆ If no safe source is available, filter or boil the water (rolling boil for one minute) or use chlorine tablets before drinking or using the water.
- ◆ Use clean, covered containers to collect and store water. Wash your hands before collecting water.



Store food safely

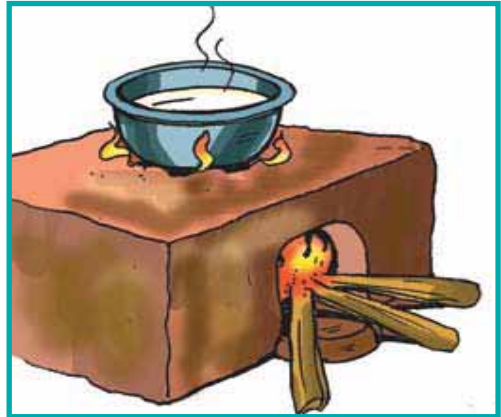
- ◆ Buy fresh foods, such as meat or fish, on the same day you will eat them.
- ◆ Cover foods to protect them from insects, pests and dust.
- ◆ Store fresh food (especially food from animals) in a cool place (a refrigerator if available).
- ◆ Keep dry foods such as flours and legumes in a dry, cool place where they are protected from insects, rats and mice, and other pests.
- ◆ Do not store leftover foods for more than a few hours (except in a refrigerator). Always store them covered and reheat them thoroughly until hot and steaming (bring liquid food to a rolling boil).

Prepare food in a clean and safe way

- ◆ Always wash hands before handling food.
- ◆ Keep food preparation surfaces clean. Use clean, carefully washed dishes and utensils to store, serve and eat food.
- ◆ Wash vegetables and fruits with clean water. If you have no clean water, peel when possible.
- ◆ Prevent raw meat, offal, poultry and fish from touching other foods. These foods often contain dangerous germs and worms which can easily wander to other foods. Wash surfaces touched by these raw foods with hot water and soap.



- ◆ Cook meat, offal, poultry and fish well. Meat should have no red juices.
- ◆ Hard-boil eggs. Do not eat raw or cracked eggs because they can contain dangerous germs (called salmonella) that cause food poisoning.
- ◆ Boil milk unless it is from a safe source. Soured and fermented milks may be safer than fresh milk.



- ◆ Do not eat or use moldy foods. They can make you very ill.
- ◆ Cover any wounds on hands before preparing food to avoid contaminating it.
- ◆ Do not spit near food or water.

Use and store chemicals and pesticides carefully

Pesticides and other agricultural chemicals can seriously poison people if they get into food or water.

- ◆ Follow carefully the instructions for using chemicals.
- ◆ Never put food or water in empty containers that have been used for chemicals.
- ◆ Do not store chemicals close to food items and keep them out of children's reach.
- ◆ Wash hands after using chemicals.
- ◆ Wash all foods (e.g. vegetables and fruit) that could have been sprayed with pesticides or other chemicals.

Other important tips

PASS IT ON!

- ◆ Train your children to do all these things.

Functions of food

Fact

Foods are necessary to make the body function well. In particular, they:

- ◆ provide energy
- ◆ help the growth and repair of the body
- ◆ protect the body against illness.



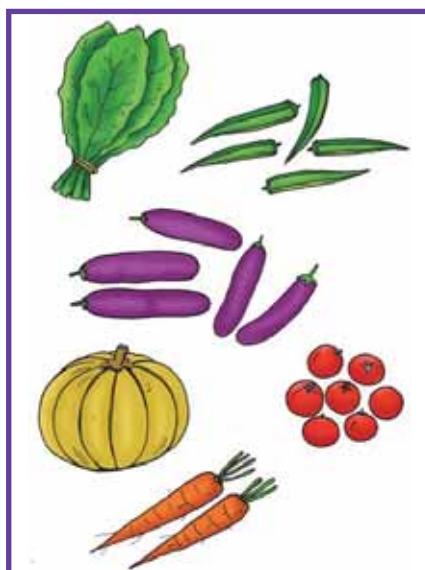
Most foods have more than one function

All foods provide energy but some provide more than others.

Most foods help the body to grow and repair and protect the body against illness.

Some foods are particularly good at this.

- ◆ Staple foods (cereals and starchy roots) mainly provide energy. Cereals also help body growth and repair.
- ◆ Vegetables and fruits mainly protect the body against illness.
- ◆ Legumes, oilseeds and nuts mainly help the body to grow and repair. They also help to protect the body against illness. Oilseeds, nuts and groundnuts provide extra energy, too.
- ◆ Animal foods (e.g. milk, eggs, meat, fish, offal) mainly help the body to grow and repair. They also provide energy and protect against illness.



- ◆ Fat and oils mainly provide energy. If added to vegetables, they improve the protective function of vegetables. Red palm oil also protects the body against illness.
- ◆ Sugar and sugary foods only provide energy.
- ◆ Breast milk provides everything that a baby needs up to the age of 6 months.

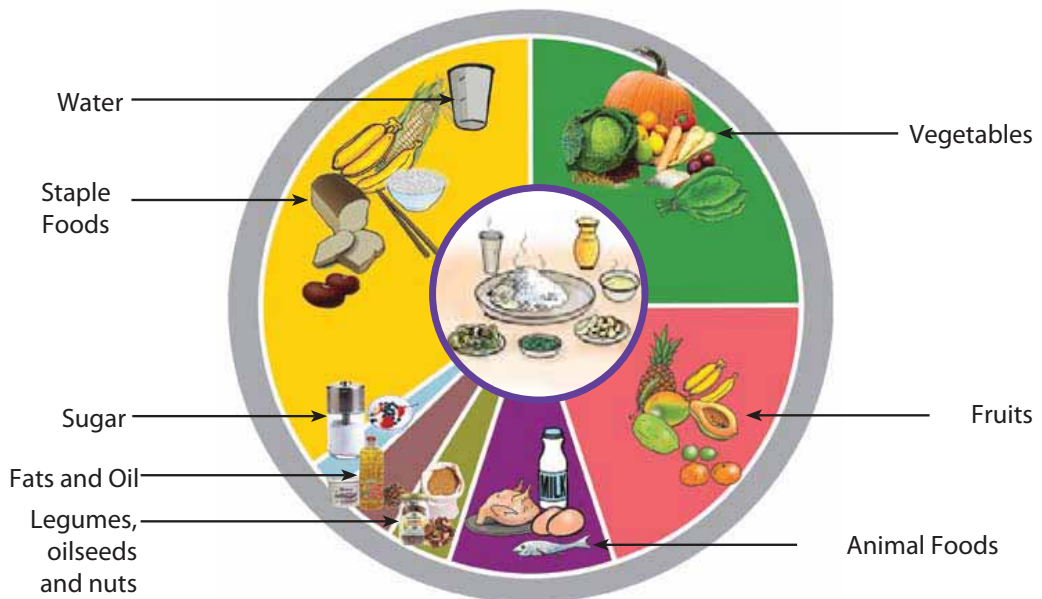
Act

Eat a variety of foods every day so that your body gets enough energy and everything it needs to be active, to grow and be protected against illness.

A healthy diet is important because it:

- ◆ keeps the body and mind healthy
- ◆ gives the body energy to be active and function well
- ◆ helps the body to grow and repair itself
- ◆ helps the body to fight infections and illness
- ◆ makes children grow well
- ◆ makes pregnant women produce healthy babies.

A healthy Diet



A healthy diet has a variety of foods from different food groups

Staple foods

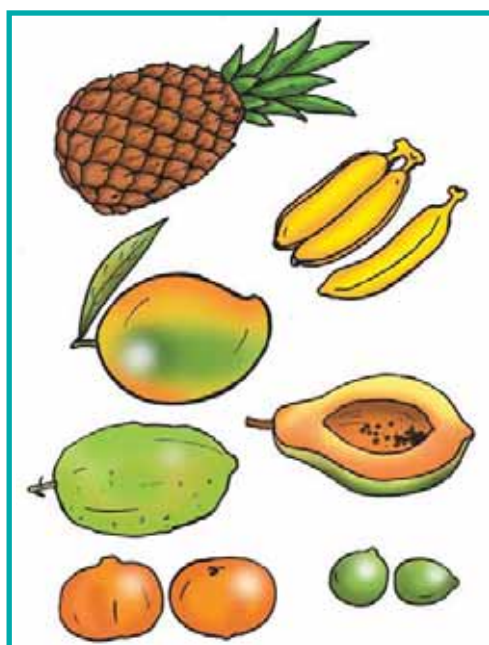
- ◆ Cereals: e.g. maize/cornmeal, millet, sorghum, wheat flour, rice
- ◆ Starchy roots: e.g. potato, sweet potato, yam, fresh cassava, cassava flour, plantain

Legumes, oilseeds and nuts

- ◆ Legumes: e.g. cowpea, pigeon pea, kidney bean, lentil, chickpea, groundnut
- ◆ Oilseeds: e.g. soybean, pumpkin, sunflower seed, sesame, melon seed
- ◆ Nuts: e.g. chestnut, walnut, hazelnut, macadamia, almonds

Vegetables and fruits

- ◆ Vegetables: e.g. tomato, pumpkin, carrot, spinach and other leaves, orange sweet potato, sweet pepper, eggplant
- ◆ Fruits: e.g. mango, pawpaw, passion fruit, orange, pineapple, banana, dates



Fats and oils

- ◆ Fats: e.g. butter, margarine, fat from meat, ghee
- ◆ Oils: e.g. coconut oil, sunflower oil, groundnut oil, red palm oil, maize oil, oilseeds

Animal foods

- ◆ Meat, offal, poultry and fish: e.g. beef, goat, sheep, pork, liver and other offal, chicken, fresh or dried or canned fish
- ◆ Milk, eggs and dairy products: e.g. fresh cow milk, fresh goat milk, eggs, curds, yoghurt, cheese

Sugars

- ◆ e.g. sugar cane, honey, jam

Sugar can improve the energy content and taste of foods, but eating sugary foods (like sweets, candies, sodas, jam, sweet cakes, biscuits) regularly and in large amount is not healthy.

Act

Eat a variety of foods in the right proportions

Too much, as well as too little, food is bad for your body. A healthy, balanced diet has the right proportions of good quality foods.

The plate shows the proportions of the different food groups you should eat during the day. Make sure you have a total of at least 2-3 meals per day.

- ◆ Staples are the biggest portion of the plate. They should be the main component of your diet.
- ◆ Vegetables and fruits are about one-third of the plate. Have plenty of them, at least 5 a day, ideally different ones. Have them with your meals and as snacks in between meals.
- ◆ Meat, eggs, fish, dairy products, legumes and oilseeds make up a smaller part of the plate. Every day you should eat at least ONE of these:



- ◆ an animal product (e.g. meat, poultry, offal, milk, dairy products)
- ◆ or fish
- ◆ or legumes.
- ◆ Fats and oils are a small part of the plate. Add them to vegetables and meals in small amounts (e.g. 3-4 tablespoons per day per person).
- ◆ Sugars and sugary foods are the smallest part of the plate. Eat them only in moderation.
- ◆ Drink plenty of water (e.g. 8 cups a day).
- ◆ Breast milk is the best food for babies under 6 months.

Get the best from your food

- ◆ Eat fruits with every meal to improve iron absorption (see Fact Sheet 5).
- ◆ Add a little fat (oil or butter) to increase absorption of vitamins (e.g. vitamin A).
- ◆ Use iodised salt to get enough iodine. Do not use more than 1 teaspoon per person per day (see Fact Sheet 7).
- ◆ Do not drink tea or coffee until 1-2 hours after a meal because it will reduce iron absorption (see Fact Sheet 5).

Eat a colourful diet

A healthy diet has a lot of colours. Especially colourful are vegetables and fruits.

- ◆ red : e.g. tomato, red pepper, red plums, red watermelon, beets
- ◆ orange : e.g. carrots, mangoes, oranges, papaya, pumpkin, sweet potato
- ◆ yellow : e.g. corn, grapefruit, lemon, pineapple, yellow bell pepper
- ◆ green : e.g. avocados, green beans, kale, kiwi, leeks, peas, spinach
- ◆ white : e.g. bananas, garlic, potatoes

Have two or three meals a day and snacks in between

- ◆ Healthy snacks are e.g. fruits, vegetables, boiled eggs, sour milk, bread, sweet potatoes, boiled or roasted maize cobs, fried fish, chapatis, bean cakes, nuts and oilseeds.

Other important tips

WARNING! Do not drink alcohol regularly and/or in large amounts. It is not part of a healthy diet.

Iron makes the body strong

Fact

Iron keeps the body strong and helps children learn

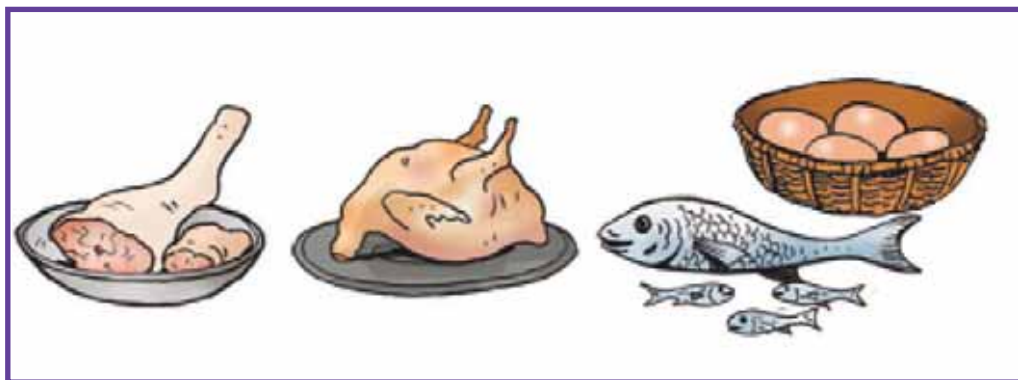
- ◆ It strengthens the blood.
- ◆ It builds muscles and brain.
- ◆ It helps the body to work properly.

A lack of iron in the diet causes anaemia, which makes people tired and breathless.

A well-balanced diet with a variety of foods provides enough iron

Iron is found in some animal foods:

- ◆ liver, blood and other offal
- ◆ flesh of animals, birds and fish, especially red meat
- ◆ eggs



Iron from animal foods can be easily used by the body.

Iron is also found in some plant foods:

- ◆ whole grain cereals (e.g. maize, millet, sorghum, wheat)
- ◆ legumes (e.g. beans, peas, lentils)
- ◆ dark green leafy vegetables (e.g. spinach, amaranthus, pumpkin leaves, kale)

- ◆ Iron from plant foods can be better used by the body if it is eaten with animal foods or fruits.



- ◆ Good fruits to eat with iron-rich plant foods are orange, mango, guava, pawpaw and lemon.

Women need more iron

- ◆ Women and older girls should have more iron-rich foods than men because they lose iron during menstruation.
- ◆ During pregnancy, anaemia can cause problems during delivery and hinders the healthy development of the child. For this reason, pregnant women are often advised to take iron tablets.



For babies under 6 months the best source of iron is breast milk.

Act

- ◆ Eat a variety of foods every day, including iron-rich foods.
- ◆ Eat fruits with or after your meals to make better use of the iron in the food.
- ◆ Do not drink tea or coffee until 1 or 2 hours after a meal because it reduces the use of iron in the body.

- ◆ Make sure that the women and older girls in your household eat plenty of iron-rich foods.
- ◆ Make sure to give iron-rich foods to children 6 months and older.
- ◆ If you are pregnant, get advice from local health care centres to see if you need iron tablets.

Vitamin A keeps the body healthy

Fact

The body needs vitamin A because:

- ◆ it protects against illness
- ◆ it helps the body to recover more quickly from illness
- ◆ it helps to keep eyes healthy
- ◆ it helps to keep the skin, gut and lungs healthy.



People who do not eat enough vitamin A are more likely to become ill and die. Children especially are at high risk. Thousands of children die every year because of lack of vitamin A.

The first signs of vitamin A deficiency are night blindness, dry eyes and eye infections.

Vitamin A can be found in a variety of animal and plant foods

Animal foods that have plenty of vitamin A:

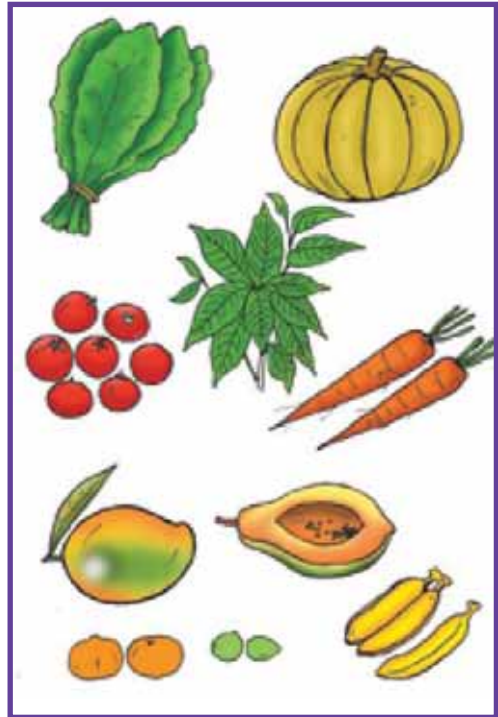
- ◆ Liver and kidney
- ◆ Eggs and milk
- ◆ Butter and cheese
- ◆ Whole dried fish (including liver)

The body can easily use vitamin A from animal foods.



Plant foods that have plenty of vitamin A

- ◆ Orange and yellow vegetables
 - » (e.g. carrots, pumpkin, orange and yellow sweet potatoes)
- ◆ Green leafy vegetables
 - » (e.g. spinach, amaranthus, kale)
- ◆ Orange and yellow fruits
 - » (e.g. ripe mangoes, ripe pawpaws)
- ◆ Fresh red palm oil
- ◆ To get more vitamin A from plant foods, cook them (if possible) and add some fat or oil.
- ◆ The darker the green vegetables are, the more vitamin A they have.
- ◆ Some fats and oils that increase vitamin A absorption are butter and margarine, vegetable oil, groundnut or sunflower oil.



For babies under 6 months the best source of vitamin A is breast milk, if the mother has enough vitamin A

- ◆ In areas with vitamin A deficiency, health workers advise supplements for breastfeeding women and children
- ◆ Vitamin A supplements might be given to young children and women within six weeks after giving birth.
- ◆ High dosages of vitamin A supplements should not be given to women during pregnancy because they might harm the unborn baby.
- ◆ Local health care centres will give advice on adequate supplements and dosages.

Act

- ◆ To get enough vitamin A, eat at least one vitamin A-rich food per day, e.g.:
- ◆ 1 table spoon of red palm oil, 1 medium-sized mango, 1 egg-sized piece of liver, 1 medium-sized small pawpaw, 1 medium-sized yellow sweet potato or 1.5 cups of green leafy vegetables.

- ◆ Cook vitamin A-rich vegetables and add some oil to help your body make use of the vitamin.
- ◆ If you are pregnant or breastfeeding, eat plenty of vitamin A-rich foods to stay healthy and to make sure your child stays healthy and grows well.
- ◆ Give plenty of vitamin A-rich foods to children 6 months and older. They prevent illness and night blindness and save lives.
- ◆ If you are breastfeeding or have young children, ask your local health care centre if you or your children need vitamin A tablets.

Iodine makes the body function-properly

Fact

Iodine is important because:

- ◆ it makes the brain and body function properly
- ◆ it is essential to the healthy development of unborn babies and young children
- ◆ it helps pregnant women to deliver healthy babies.



A sign of a lack of iodine in the diet is the swelling of the front neck, called goiter.

Everybody needs iodine

- ◆ Everybody needs enough iodine in their diet to stay healthy and prevent goiter. In particular, pregnant women, breastfeeding women and young children need enough iodine to make sure the child develops well mentally and physically.



Iodine is found in iodized salt, sea-fish and seafood

- ◆ In areas where it is hard to get sea-fish and seafood, iodized salt is an important part of every diet.

For babies under 6 months, the best source of iodine is breast milk.

Act

Always use iodized salt when cooking and eating family meals

- ◆ Make sure the salt you buy carries the label “iodized”.
- ◆ Add iodized salt to food on the table or when it is nearly cooked. Do not cook iodized salt too long, it destroys the iodine.

Do not use a lot of salt

- ◆ Do not use more than 1 teaspoon of salt per person per day. Too much salt is not good for your heart and blood pressure.
- ◆ Use herbs, spices, garlic and onions to flavour foods instead of too much salt.
- ◆ The more processed foods you eat, the less table salt you should use.

Food for pregnant and breastfeeding women

Fact

Pregnant and breastfeeding women need to eat a healthy and well-balanced diet because it:

- ◆ makes them feel well and active
- ◆ helps the baby to grow healthy and strong
- ◆ makes birth easier
- ◆ helps them to breastfeed the baby successfully



Act

If you are pregnant and breastfeeding, you should eat healthy, balanced diets for a strong and healthy baby

- ◆ Eat a variety of foods in the right proportions (see Fact Sheet 4).
- ◆ Eat 2 to 3 meals a day and healthy snacks in between.
- ◆ Make staple foods (e.g. maize meal, millet, rice, bread, potato, yam, cassava, etc.) the main component of your diet.
- ◆ Eat plenty of vegetables and fruits. They protect your and your baby's health, and prevent illness. Green leafy vegetables and orange/yellow vegetables are especially healthy because they contain vitamin A (see Fact Sheet 6).
- ◆ Eat plenty of animal foods (meat, offal, eggs and milk)

If you are pregnant

- ◆ Your body needs more energy than usual, particularly towards the end of the pregnancy. Eat an extra nutritious snack during the day (e.g. fresh milk, sour milk, groundnuts, eggs, fried fish, bread, boiled or fried cassava, bean cakes, bananas, avocados, mangoes).
- ◆ If you are given iron and folic acid tablets, take them regularly. Your body needs more iron and folic acid during pregnancy.

If you are breastfeeding

- ◆ Your body needs even more energy when breastfeeding than during pregnancy because you have to feed two – yourself and your baby.
- ◆ Eat more at each meal
- ◆ or have meals more frequently,
- ◆ or eat more nutritious healthy snacks during the day.
- ◆ You may be given vitamin A capsules to take immediately after birth. They protect you and your baby against illness.



Other important tips

- ◆ **WAIT** at least one year between pregnancies, even better, 2 to 3 years. After pregnancy and breastfeeding, your body needs time to recover and rebuild strength. If your body is not strong and healthy, you are at higher risk of miscarriages and of giving birth to a sick or underweight baby.
- ◆ **EAT WELL** between pregnancies to rebuild your body.
- ◆ **TAKE NOTE!** It is better not to have a baby when you are too young (e.g. under 16 years) or too old (e.g. over 35 years). It is dangerous for both mother and baby.
- ◆ **DEAL PROMPTLY** with breastfeeding problems (e.g. sore nipples, swollen breasts, thrush in the baby's mouth).
- ◆ **REMEMBER!** To prevent food poisoning and food illness, always wash your hands before handling and eating foods. Prepare and store food in a safe and clean way (see Fact Sheet 2).

Feeding babies aged 0-6 months

Fact

Breast milk is the only food a baby needs during the first six months

- ◆ It makes the baby grow strong and healthy.
- ◆ Breast milk gives babies all the food and water they need during the first six months of life.
- ◆ A baby's stomach cannot digest any foods except breast milk and infant formula.
- ◆ Exclusive breastfeeding until the baby is six months old protects the baby against sicknesses (e.g. diarrhoea). Exclusive breastfeeding means giving the baby breast milk only and nothing else.



When doing exclusive breastfeeding, women are less likely to become pregnant.

Act

Feed your baby only breast milk during the first 6 months

- ◆ Put the baby to your breast immediately after birth. A new born baby can suckle strongly.
- ◆ Give the first milk (colostrum) to your baby. It protects him/her from many diseases.
- ◆ Your breast milk has all the food and water your baby needs. Do not give any other water or foods in the first 6 months, it could make your baby sick (e.g. with diarrhoea).
- ◆ Breastfeed when the baby wants to feed, at least 8-10 times during the day and night.
- ◆ Regular breastfeeding will help your body to produce enough milk and keep your breasts from becoming swollen and painful.

Important for HIV-positive mothers

- ◆ There is a small chance that an HIV-positive mother may pass HIV to her baby through breast milk. For that reason, sometimes replacement feeding (infant formula) is recommended. However, if replacement feeding cannot be carried out in a safe way (see further below) it can harm your baby and cause illness or death. Most of the time exclusive breastfeeding is the safest and healthiest way to feed your baby for the first 6 months.
- ◆ Never practise mixed feeding (which means combining breastfeeding with infant formula or other foods).
- ◆ Discuss with your health care centre which feeding method is suitable for your baby.

If you decide to breastfeed your baby

- ◆ Start breastfeeding immediately after birth and do not give any other food or drink.
- ◆ Immediately go to the clinic if you have cracked nipples or swollen breasts, or if your baby has sores or thrush in the mouth.
- ◆ After six months, stop breastfeeding quickly (e.g. over 2 days to 3 weeks maximum).

If you decide to give your baby infant formula (replacement feeding) you need to have

- ◆ enough money to buy infant formula
- ◆ clean water and good sanitation
- ◆ a clean home and a cool, safe place to store the milk (a fridge or clean closed cupboard)
- ◆ enough cooking fuel to prepare the infant formula
- ◆ the means to prepare your baby's food both day and night
- ◆ access to healthcare facilities
- ◆ good family support.
- ◆ Do not breastfeed your baby once you have started giving infant formula.

Other important tips

- ◆ **TAKE NOTE!** Skin-to-skin contact between you and the baby is good for you and your baby in many ways. It also helps you to breastfeed your baby successfully.
 - » Have skin-to-skin contact with your baby right after birth. You and your child should not be separated after birth.
 - » Let the baby sleep close to you. That also makes it easier to feed him/her.

- ◆ **WATCH** over your baby's weight and health through regular visits to the health care centre.

- ◆ **TAKE NOTE!** When breastfeeding, you need more food than usual because you have to feed two – yourself and your baby. Eat a healthy, balanced diet with plenty of foods that give you energy and help to protect you and your baby's health (see Fact Sheet 8).

- ◆ **REMEMBER!** Wash your hands after changing the baby's nappies. This avoids spreading germs that can cause illness.

Feeding young children aged over 6 months

Fact

A baby over 6 months needs breast milk and other foods

- ◆ Up to six months, a baby should have ONLY breast milk.
- ◆ After 6 months, breast milk is not enough for a baby to grow well. It needs other foods.
- ◆ But it is important for a child's growth and health to continue breastfeeding until he/she is at least 2 years old (unless the mother is HIV-positive, see below).



Young children need frequent meals

- ◆ Young children have small stomachs and can only eat small portions at a time. To get enough food to grow well, they need meals frequently.
- ◆ Young children should have 2-4 meals a day plus 1-2 healthy snacks in between.



Some healthy snacks for young children are:

- ◆ fruits, vegetables, boiled eggs, sour milk, bread, sweet potatoes.

Act

To give your child a healthy diet from 6 months to 2 years

- ◆ Continue breastfeeding.
- ◆ Feed a variety of foods.
- ◆ Make staple foods, like porridge, rice, mashed potatoes, the main component of the diet.
- ◆ Feed your child plenty of fresh vegetables (including green leafy vegetables) and fruits. These foods keep your child healthy and protect him/her against illness. Green leafy vegetables and orange/yellow vegetables are especially healthy because they contain vitamin A (see Fact Sheet 6).
- ◆ Feed your child animal foods (e.g. milk, eggs, meat, offal, poultry, fish) or legumes (beans, lentils, peas) every day. These foods help your child to grow well.
- ◆ Include a little fat or oil in meals to add energy and to absorb vitamins.
- ◆ You can also add mashed groundnuts and other mashed nuts and seeds to your child's meal. It will add more energy and help the child to grow well.
- ◆ Give your baby clean water whenever he/she is thirsty.

Give more foods as the baby grows

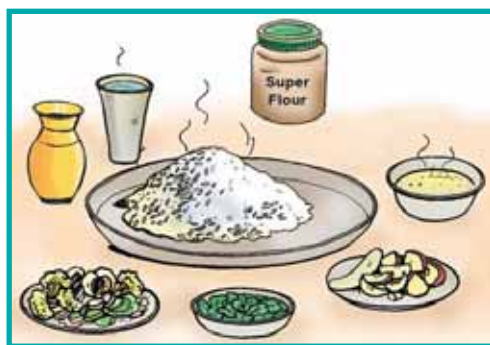
The amount of foods and the number of meals gradually increase with your child's age.

Age 6-7 months

- ◆ Type of food
 - » Start giving semisolid foods (e.g. plain or fermented porridge, mashed potato).
 - » Gradually add legumes and oilseed flours, mashed vegetables and fruits, a little oil and, when possible, animal foods (e.g. milk, minced meat, eggs, fish flesh).
 - » Continue breastfeeding.



- ◆ How often
 - » Start with 1-2 teaspoons of semisolid foods twice a day. Gradually increase the amount and raise the frequency to 2-3 meals per day.



Age 8-11 months

- ◆ Type of food
 - » Start giving small foods which your baby can hold him/herself (e.g. bread, banana).
 - » Continue breastfeeding.
- ◆ How often
 - » 3 times a day plus 1 healthy snack.

Age 1-3 years

- ◆ Type of food
 - » Share family meals with your child.
 - » Give the child his/her own bowl or plate to make sure that he/she gets enough food, especially animal foods (meat, fish, eggs) or legumes, and vegetables and fruits.
 - » Continue breastfeeding up to 2 years.
- ◆ How often
 - » 3-4 times a day plus 1 or 2 healthy snacks.

Other important tips

- ◆ **REMEMBER!** Wash your hands before preparing your child's food and before feeding your child. Only use clean utensils.
- ◆ **MAKE SURE** the meals do not contain bones or hard pieces that might make the child choke.
- ◆ **BE CAREFUL!** Do not make meals too spicy or salty. Too much salt is bad for children.
- ◆ **ENCOURAGE** young children to eat in a loving way.
- ◆ **CHECK** your baby's weight gain and health. Visit the health care centre regularly.

Feeding school-age children and youth

Fact

School-age children and youth need to eat healthy, balanced meals

Children's bodies are growing and developing very fast. For this reason, they need increasing amounts of food that:

- ◆ provide energy: e.g. cereals, starchy roots
- ◆ help growth: e.g. animal foods, legumes and oilseeds
- ◆ protect against illness and maintain health: e.g. vegetables and fruits.



Hungry children cannot study well. Children need three meals a day. Breakfast before going to school is particularly important for helping them to learn well.



Healthy snacks between meals make sure the child has enough energy and grows well

Some healthy snacks are fruits, vegetables, boiled eggs, sour milk, bread, sweet potatoes, boiled or roasted maize cobs, fried fish, chapatis, bean cakes, nuts and oilseeds.

Eating many sticky, sugary and salty snacks (like sweets, chocolates, candies, sodas, lollies, crisps) is not good for a child because:

- ◆ they can cause tooth decay
- ◆ they can lead to overweight and obesity, and overweight-related diseases like high blood pressure and diabetes
- ◆ they are poor value for money because they do not help the body to grow well nor protect against illness.

Act

Make sure your child eats healthily

- ◆ Give your child three meals a day and snacks in between.
- ◆ Give your child a variety of foods in the right proportions (see Fact Sheet 4).
- ◆ Make staple foods (e.g. maize meal, millet, rice, bread, potato, yam, cassava) the main component of the child's diet.
- ◆ Give your child plenty of fresh vegetables (including green leafy vegetables) and fruits. These foods keep your child healthy and protect him/her against illness. Green leafy vegetables and orange/yellow vegetables are especially healthy because they contain vitamin A (see Fact Sheet 6).
- ◆ Give your child animal foods (e.g. milk, eggs, meat, offal, poultry, fish) or legumes (beans, lentils, peas) every day. These foods help your child to grow well.
- ◆ Include a little fat or oil in meals to add energy and help to absorb vitamins.
- ◆ Add oilseeds (e.g. groundnuts, soybeans) to your child's diet. They provide extra energy and are good for growth.
- ◆ Add a little iodized salt to family meals. Do not use more than 1 teaspoon per person per day.
- ◆ Make sure your child eats fruits with or after every meal to protect health and improve iron absorption.
- ◆ Give your child plenty of clean water to drink.

Adolescent girls need more iron-rich foods

Adolescent girls, when they start menstruation, need twice as much iron as boys (see Fact Sheet 5). Give girls iron-rich foods daily, e.g. animal foods (meat, fish, offal, eggs, milk), legumes (peas and beans) or dark green leafy vegetables, and make sure they eat fruits with their meals.



Other important tips

- ◆ **REMEMBER!** Remind your children to wash their hands with clean water and soap before starting to eat. Teach them to use clean utensils for preparing and eating foods.
- ◆ **PASS IT ON!** Teach your child to recognise and choose healthy foods. Know what foods your child eats and buys at school and guide your child on healthy food choices. For example, explain what healthy snacks are and discuss the health value of snacks that children can buy in schools.

Food and care for older people

Fact

Older people need less food but they still need good quality food

- ◆ Older people are often less active and spend less energy. For this reason, they need smaller amounts of the foods which provide energy, e.g. fats and oils, staple foods and sugars.
- ◆ But older people need plenty of foods that repair the body, protect against illness and keep them in good health. These foods are: fresh vegetables and fruits, animal foods, legumes and oilseeds.



Act

To stay active and healthy, older people need to eat a balanced diet

- ◆ Have smaller meals, 2-3 times a day, plus healthy snacks between meals.
- ◆ Eat a variety of foods in the right proportions (see Fact Sheet 4).
- ◆ Eat staple foods (e.g. maize meal, millet, rice, bread, potato, yam, cassava, etc.) as the main component of the diet.
- ◆ Have plenty of fresh vegetables and fruits. They protect against illness and

keep the body healthy. Eat fruits with or after meals to absorb the iron better.

- ◆ Eat animal foods (eggs, meat, offal, poultry or fish) or legumes (beans, lentils, peas, nuts) every day. They help the body to function properly and repair itself.
- ◆ Use fat and oils only in small amounts. They help to absorb some vitamins.
- ◆ Oilseeds (e.g. groundnuts, soybeans) can provide extra energy and keep your body healthy.
- ◆ Drink plenty of clean water.



It is easier to eat well if you:

- ◆ eat soft foods if your teeth are missing or your gums are sore
- ◆ prepare food hygienically to avoid sickness (e.g. diarrhoea) (see Fact Sheet 2)
- ◆ take as much exercise as possible - it improves the appetite and keeps you healthy and active.
- ◆ get treatment for sore gums and other conditions that reduce the appetite.

Feeding sick people

Fact

A sick person needs to eat well because a good diet:

- ◆ helps to fight illness
- ◆ strengthens the body
- ◆ helps to prevent weight loss.



Act

A diet for a sick person ideally contains

- ◆ small, frequent meals with a variety of foods
- ◆ plenty to drink every 1-2 hours (at least 8 cups per day), e.g. boiled water, fresh fruit juice, coconut water, sodas, soup or watery porridge
- ◆ plenty of fresh vegetables and fruits: they help you to recover
- ◆ plenty of animal foods (e.g. meat, offal, poultry fish, eggs, milk) and/or legumes (e.g. beans, lentils, peas): they repair your body and fight the illness.
- ◆ extra fat-rich foods (e.g. avocado, oil or oilseeds) or sugar added to the meals.

Helping a sick person to eat more

- ◆ Encourage the person to eat more at each meal.
- ◆ Feed the person sitting up; feed a child on your lap.
- ◆ Keep water and food nearby if a person has to stay in bed.
- ◆ Offer soft foods (e.g. mashed bananas, soup) or sweet foods.
- ◆ Never force sick children to eat, as they may choke or vomit.

- ◆ If a breastfed child is sick, breastfeed more often.



Other important tips

- ◆ **TAKE NOTE!** People with diarrhoea or vomiting need to drink extra liquids frequently.
- ◆ **REMEMBER!** Wash your hands before and after feeding sick people.

Fact

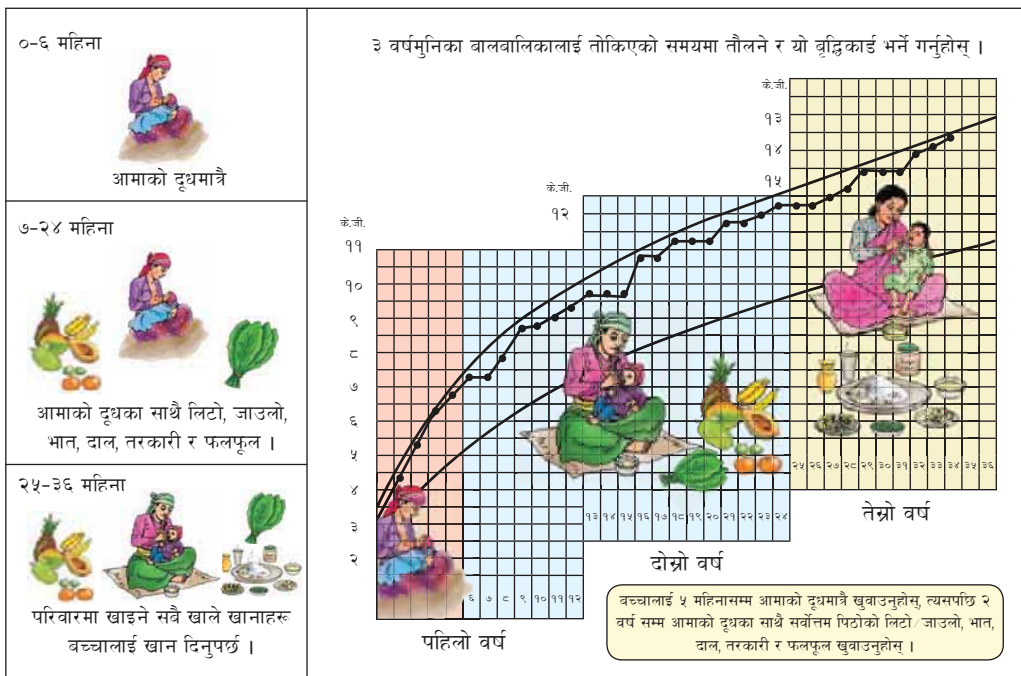
Children are at risk of malnutrition when:

- ◆ they are not eating enough (quantity)
- ◆ they are not eating the right foods (quality)
- ◆ they suffer from diseases (e.g. diarrhoea, malaria) or infections (e.g. hookworm infections, HIV/AIDS).

Young children are at high risk of malnutrition, especially from the age of 6 months, when breast milk alone is not enough, until the age of 3 years.

Continuous steady weight gain shows the child is healthy and growing well

- ◆ Healthy babies and young children grow very fast.
- ◆ Families and health workers can find out if children are well nourished by weighing them regularly and registering their weights on growth charts.
- ◆ Each time the child is weighed, his/her weight is plotted as a dot on the growth chart. Joining the dots forms a line which shows whether the child is growing well. The printed lines on the growth chart represent the ideal growth of a healthy child.
- ◆ If the plotted line goes up and stays close to the centre line, the child is growing well, and is almost certainly healthy and eating well.
- ◆ If the plotted line goes too far from the centre line, the child is malnourished. There are three situations which may need special attention:
 - » The plotted line stays flat: the child is not growing well. The child may be sick and/or not eating enough.
 - » The plotted line goes down: the child is in danger, is not eating enough and is certainly ill.
 - » The plotted line goes up very steeply: this probably means that the child is catching up weight lost during illness. It can also mean the child is gaining more weight than normal and may become overweight or obese.



After three consecutive weighing sessions, if:



= Very Good



= Bad/Suspicious



= Very Bad

Preventing malnutrition

- ◆ A healthy, balanced diet is the best way to prevent malnutrition.
- ◆ Sometimes it may be difficult to eat a healthy, balanced diet meal ; then supplements like iron and vitamin A may be prescribed for children and pregnant women. However, supplements cannot replace a healthy, balanced diet.
- ◆ In areas with severe acute malnutrition, children may be given so-called Ready-to-Use Therapeutic Foods (RUTF). These sachets provide all nutrients a child needs to recover from under nutrition. But RUTF is an emergency treatment and, like supplements, is not a long-term solution to malnutrition.

Act

- ◆ Have your child weighed during every visit to a health care centre. From birth to two years, weigh children regularly.
- ◆ Make sure your child has a growth chart.
- ◆ If your child is found to be undernourished, keep a close eye on his/her weight. Consult the health worker about how to help the child grow normally – for example, by eating more food or different food, or by eating more often. Sometimes a child needs more emotional support or stimulation or more physical activity to become healthy. If you think you cannot provide a healthy, balanced diet for your child, try to get supplementary feeding or supplements from the health worker.
- ◆ Always follow good hygiene practices to prevent diseases which cause malnutrition (see Fact Sheet 1 & 2).

BE CAREFUL! Treat severe malnutrition immediately

When a child is extremely thin and/or has both feet swollen, it may mean severe malnutrition. This is a dangerous illness. Take the child to hospital immediately, and keep him/her warm and fed during the journey.

*This child
presents signs
of marasmus*



*This child
presents signs of
kwashiorkor*

Immunisation protects the child's health'

Every child needs a series of immunisations during the first year of life to be protected against dangerous diseases (e.g. whooping cough, polio, measles, diphtheria, tetanus) which can lead to serious illness, disability and death.



Even if a child has minor illness (e.g. fever, cold, cough), a disability or is malnourished, it is safe to immunise.

All pregnant women should check with a health worker for advice on tetanus vaccination. Tetanus can be dangerous for the mother and the new-born baby.

CHILD HEALTH CARD

1. Child's Name:
2. Date of Birth
3. Sex:
4. Father's or Mother's Name:
5. Address: District VDC/Municipality Ward No. Tole
6. Health Service Organization:
7. Card Issued Date:

Service Registration No.	Vaccine	Nutrition <small>(Vitamin A supplementation)</small>	Other

Vaccine	Vaccination date (date/month/year)		
	1	2	3
BCG	.../.../.....		
DPT-HEP B	.../.../.....	.../.../.....	.../.../.....
Polio	.../.../.....	.../.../.....	.../.../.....
Measles	.../.../.....		
JE	.../.../.....		
Other/.../.....	.../.../.....	.../.../.....
.....	.../.../.....	.../.../.....	.../.../.....

