LEARNING OBJECTIVES



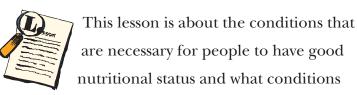
- explain how adequate food, health, knowledge and care are fundamental conditions for good nutritional status;
- understand that poverty is the underlying cause of much malnutrition and give examples of how poverty and malnutrition affect each other;
- explain how poor nutritional status affects people, families and communities.



Lesson 2

Analysing the conditions that affect nutritional status

LESSON OVERVIEW



can cause poor nutritional status and malnutrition. It explores the many things we need for good nutritional status: enough food to eat to meet our nutritional needs; clean water and living conditions to help us avoid disease; medical care to help prevent and treat disease; and the knowledge and ability to feed and care for ourselves and our families properly. It discusses the causes of poor nutritional status and how malnutrition affects people's lives and explains how poverty is the underlying cause of much malnutrition in the world.

Topic 1What it means to be healthy and well-nourished



Fundamental conditions for good nutritional status



Good nutritional status helps us maintain all important body functions so that we can grow and develop properly and lead healthy, active lives. Nutritional status is the condition of the body resulting from the nutrient content of the food we eat in relation to our nutritional needs, and from the ability of our bodies to digest, absorb and use those nutrients.

In order to have good nutritional status, we need certain fundamental conditions. We need to always have enough nutritious and safe food to eat; we need clean water, good sanitation and clean living conditions; we need access to health services; and we need the knowledge and ability to feed and care for ourselves and our family. Each of these conditions is essential for good nutritional status and they often affect each other. If any of these are missing, the result can be malnutrition and disease.

Food

The foundation for good physical health is good nutritional status. Nutritional status is directly affected by the foods we eat and their nutrient content. Good nutritional status depends on eating the right amounts and the right variety of safe, good quality foods to meet our individual nutritional needs.

TO THINK ABOUT WHILE READING

How important is it to have good nutritional status?

What conditions are needed to have good nutritional status?

Food provides the energy and nutrients needed to support all body functions, maintain good health and carry out everyday activities. Food contains many ingredients, called nutrients, which help the body function well. Foods are complex mixtures of different components, providing varying amounts of the nutrients the body needs. Most nutrients cannot be produced by the body and must be taken in adequate amounts from the food we eat in order to be healthy and prevent disease. No single food contains all the nutrients needed by the body in the right amounts; one food may be rich in one or two nutrients, but low in other essential nutrients. It is only by eating adequate amounts of a variety of foods that we can help ensure that we will take in the right amounts of the nutrients needed for good health and nutritional status.

Topic 1What it means to be healthy and well-nourished



Part 1 Fundamental conditions for good nutritional status

Individuals and families must always be able to get the food they need to be well-nourished. This means that people must be able to grow, hunt or catch the food they need or earn enough money to buy it. Food must be sufficient in both amount and variety to meet the needs of all family members. It must be safe – not contaminated or harmful to health – and of good quality – fresh, unspoiled and of good nutritional value. Food must also be acceptable to the culture of that family or household.

Producing more food in the country or community does not guarantee that people will have the food they need for good nutritional status. For example, if local shops and markets do not offer a good variety of foods, if people cannot afford the food that is available, if their diets lack the variety needed for all of the essential vitamins or minerals, if adequate food is not available in all seasons and all year long, or if food is spoiled, contaminated or unsafe to eat, people will not have the food they need for good nutritional status.

Health, living conditions and health services

Many common infectious diseases and common parasites have a major effect on health and nutritional status; for example, diarrhoeal and respiratory diseases, measles, malaria, tuberculosis, roundworms, hookworm and HIV/AIDS. The infections themselves damage nutritional status: a person suffering from infection usually has little appetite and tends to eat less. This lack of food during illness can be a serious threat to the health of a malnourished person, who has little or no stored reserves of energy and nutrients. Poorly nourished people are likely to suffer from these diseases more often, more severely and for longer periods of time than well-nourished people. In addition, infectious diseases can increase the need for certain nutrients, and especially energy. When people have diarrhoea, their bodies lose fluids and nutrients instead of absorbing them, so their supply of nutrients gets used up very quickly. This leads to a continuing cycle of malnutrition and infection. Infections and other illnesses can worsen the state of malnutrition, and poor nutrition can worsen an infection and weaken the body's ability to fight disease.

Infectious diseases are easily spread through poor living conditions, lack of sanitation and from person to person. Clean water, effective sanitation facilities for the removal of human waste and rubbish, keeping places free from insects, rodents and parasites, and avoiding overcrowding are all necessary for reducing the risk of spreading disease. Disease is also spread by poor handling of both raw and cooked foods (called "food-borne illness"). Keeping the environment as clean as possible, practising good personal hygiene and food handling habits help decrease the spread of these diseases.

Topic 1What it means to be healthy and well-nourished



Part 1 Fundamental conditions for good nutritional status

Adequate health services are necessary for good health and better nutritional status. By providing immunizations to help prevent disease, providing care and therapy to help people recover from illness and by proper and quick diagnosis and treatment of disease, people can suffer less from lasting effects of disease. This will also help stop the spreading of diseases throughout the community. Health care providers can also play a major role in educating the community about disease and providing information and counselling for improving and maintaining good health and nutritional well-being.

Knowledge and care

Knowledge about our dietary needs is essential for good health and nutritional status of the entire family. Especially when families have few resources, understanding the food needs of each family member and knowing how best to distribute food among the family is very important. Often, family members at the most "nutrition-critical" stages, such as children and women, are the least likely to get the food they need. Without adequate knowledge, malnutrition and poor nutritional status can occur even in households with sufficient income, food, sanitation and health services.

An incomplete understanding of the body's nutritional needs and lack of knowledge of how to meet these needs with available foods can lead to malnutrition. If a household does not understand the dietary needs of each member of the family or does not know how to get the most from their resources, some or all of the family members may be malnourished. Sometimes people do not know the importance of variety and balance in the diet and the right amount and types of foods needed by all family members to meet their needs. Sometimes people do not know the best way to prepare foods to get the best nutritional value. Other times, certain foods are available but are not eaten because people do not recognize their food value. Sometimes nutritionally valuable local or wild foods, which have traditionally been eaten, are no longer gathered and consumed because people consider them to be "low status" foods. And sometimes poor eating habits, food taboos and cultural or religious practices prevent people from consuming the variety of foods required to meet their nutritional needs.

Time and ability to feed and care for ourselves and our families properly is also needed to improve the nutritional status of all members of the family. Malnutrition can occur, especially in children, if the adults do not have enough time to provide the care and attention needed to meet the physical, mental and social needs of the growing child and other family members. While all household members may be involved in some way in providing care for the family, in many societies it is the women who are primarily responsible for deciding what foods are eaten and how they are prepared and for providing the care that is needed for children and other vulnerable (ill or elderly)

Topic 1What it means to be healthy and well-nourished



Part 1 Fundamental conditions for good nutritional status

family members. It is important that all family members, especially women, have the knowledge, education and time they need to provide adequate care to the family.



For more information on good diets and individual nutritional needs see Lesson 6

Meeting nutritional needs throughout life and Lesson 7 Making good food choices and healthy meals.



For more information on keeping foods safe and nutritious and keeping our water, ourselves and our surroundings clean see Lesson 8 and Lesson 11.



MATERIALS



Quiz work sheet Nutritional status: true or false?



Work sheet Fundamental conditions for good nutritional status



Example work sheet Fundamental conditions for good nutritional status



ACTIVITIES

Nutritional status: true or false?



Take a <u>quick quiz</u> to check your understanding of some basic facts about nutritional status.

What fundamental conditions affect nutritional status?

Discuss or think about a person's nutritional status and what it allows us to do and write your thoughts and ideas on the board or in a notebook.

Now compare your ideas with the information from the Reading (Part 1) *Fundamental conditions for good nutritional status* which discusses how having good nutritional status depends on many things and especially on food; health, living conditions and health services; knowledge and care.



Looking at the work sheet *Fundamental conditions for good nutritional status*, note that food is a fundamental factor but not the only one affecting nutritional status. Food, health, living conditions and health services, and knowledge and care all act together to form the basis of good nutritional and health status.

Complete the work sheet by going through each of the fundamental conditions, listing as many specific examples as you can. Discuss or think about how a lack of each of these conditions can lead to malnutrition.





Part 1 Fundamental conditions for good nutritional status



When finished, compare your work sheet to the <u>example work sheet</u>; add any specific examples for each condition and discuss.

How do the fundamental conditions affect each other?

Group Activity

Looking at your completed work sheet *Fundamental conditions for good nutritional status*, note that the arrows point in many directions: they connect the fundamental conditions and nutritional status and also connect each fundamental condition to another.

Form three groups and discuss how each of the fundamental conditions has a direct effect on each other condition, as well as on nutritional status. Each group should start with one of the fundamental conditions:

Group 1. Food

List all the benefits to a family that has enough food to meet the needs of all the family members.

Group 2. Health, living conditions and health services

List all the benefits to a family that has good living conditions, adequate sanitation and access to health services.

Group 3. Knowledge and care

List all the benefits to a family that has adequate knowledge about food handling, preservation, preparation and storage and enough care time for all family members.



TLY POINTS

Review these three key points to remember about conditions that are necessary for achieving good nutritional status. Think about what you have learned and look for ways to improve some of these conditions in your own life and family.

Fundamental conditions for good nutritional status

- Food is the foundation of good nutritional status.
 We need to eat the right amounts and the right variety of safe, good quality food to meet our individual nutritional needs.
- Safe water, clean living conditions, proper sanitation and health services are fundamental for preventing and treating infections and diseases which damage health and nutritional status.
- Knowledge of how to meet the body's dietary needs with available foods and the ability to provide adequate care for all members of the family are essential for improving nutritional status.

Topic 1What it means to be healthy and well-nourished



Malnutrition: poor nutritional status



READING

Poor nutritional status, referred to as malnutrition, is an unhealthy state or condition in which a person's physical functions are temporarily or permanently damaged. People who are malnourished have a weakened defence against disease, become ill more easily and more frequently and are less able to recover quickly and fully from disease. Children who are malnourished fall ill frequently and are not able to grow and develop properly. All forms of malnutrition can result in serious health problems and illnesses. In severe cases, malnutrition is life-threatening; it often leads to death.

Malnutrition creates great suffering to the individual, the family and the society. It damages people's health and well-being and reduces their enjoyment of life. Malnutrition prevents people from being active members of their family and community. Malnourished children are too weak or sickly to attend school and learn properly which lowers their chances of good jobs and income in the future. Adults who are malnourished are less productive, have less energy to work, take care of their families and carry out activities of normal daily life. Malnutrition has high health care costs, as those suffering from nutrition-related illnesses require special care and treatment.

Mαlnutrition is caused by poor diets, illness and disease. Poor diet and disease act together, worsening the effects of each other. The combination of too little food and the presence of disease often results in malnutrition, especially in children. Poor, inadequate diets weaken the body, making disease and illness more likely. Disease, in turn, often increases the body's need for food. Repeated and prolonged illnesses, such as diarrhoea and malaria, contribute to malnutrition, as nutritional needs are higher during and following illness. Frequent episodes of illness and acute infections make it almost impossible to maintain adequate nutritional status.

Any situation that makes it difficult for people to get the food they need for themselves and their families can lead to malnutrition. Although there may be many reasons for people being malnourished, such as droughts, floods, earthquakes, failed crops, interrupted food supplies, wars,

TO THINK ABOUT WHILE READING



What do you know about malnutrition and its causes?

Who is at risk of malnutrition?

Do you know anybody who suffers from malnutrition or have you experienced it yourself? **Topic 1**What it means to be healthy and well-nourished



Part 2 Malnutrition: poor nutritional status

conflicts, civil disturbances and other emergencies, underlying much malnutrition in the world is poverty. Poverty can create situations in which people do not have enough to eat, or do not have the means to eat the variety and quality of foods they need for good nutrition and health.

Poverty and malnutrition affect each other. Malnutrition decreases peoples' ability to earn and provide for themselves thus creating additional poverty, which leads to even more hunger and malnutrition. This loss of human potential also results in greater social and economic costs to the community and the country. When a country has malnourished people, its economic situation also declines. Healthy people are vital to a country's economic growth and development, while sick people require additional care and resources from families and the community.



MATERIALS

Match it work sheet Malnutrition facts matching

Quiz work sheet Malnutrition: true or false?

Work sheet Vicious cycle of poverty and malnutrition

Example work sheet Vicious cycle of poverty and malnutrition

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Work sheet An emergency happened in our town



Reflect on what malnutrition means to you and write your own definition of malnutrition. Does your definition include all forms of malnutrition: eating too much food, too little food or a poor variety of food?



Go to the *Malnutrition facts matching* work sheet to see if you can match some facts about the effects of malnutrition.

Malnutrition: true or false?



Take a quick quiz to see what you have learned about malnutrition.

Topic 1 What it means to be healthy and well-nourished



Part 2 Malnutrition: poor nutritional status

How do poverty and malnutrition affect each other?

Poverty and malnutrition affect each other to form a vicious cycle. Poverty decreases people's ability to purchase food or grow their own food, leading to malnutrition. Malnutrition decreases their ability to learn and work, leading to additional poverty.



Print or copy on a board or in a note book the work sheet *Vicious cycle*

of poverty and malnutrition. Fill it in with your ideas about how poverty and malnutrition affect each other. Compare your completed work sheet with the example work sheet provided.

If you are working in a group, present your figures to your friends and discuss how malnutrition and poverty form a vicious cycle.

How do emergencies cause malnutrition?

Group activity

Poverty is the underlying, but not the only cause of malnutrition. Any emergency situation that decreases people's ability to get the food they need has a negative effect on nutritional status.

Reflect individually for a minute and identify one or two emergency situations that can cause malnutrition. If you run out of ideas refer to the list of emergency situations below.

Write the emergencies on separate pieces of paper, then fold them and put them in a bag or a box.

One at a time, pick one folded paper out of the bag. Read the emergency situation aloud and discuss what consequences it can have on people's lives and nutrition. Some examples are provided below.

Emergency situations:

earthquake | flood | drought | hurricane | cyclone | tornado | tsunami | war / conflict / epidemic disease / forest fire / pest / environmental disaster.

How emergencies cause malnutrition:

failed or destroyed crops; no seeds to plant; interrupted food supply; no safe drinking water; people get sick; no tools to work the fields; no medicines, doctors and nurses; animals die; animals are stolen; ruined houses, farms, roads, schools, hospitals, markets; polluted water, soil, air; destroyed forest.

Starting over

Choose a particular emergency from the list of emergency situations above: war, earthquake, drought, hurricane, etc.



Write the major consequences of the emergency on the Work sheet *An* emergency happened in our town. You can choose from some of the examples provided in the previous activity but also come up with your own ideas: *Our* house is destroyed. Our farm is burnt. Our animals are stolen. There are no

Topic 1What it means to be healthy and well-nourished



Part 2 Malnutrition: poor nutritional status

doctors and nurses. There are no schools left. There is no market. The roads are ruined. Our water supply is not sufficient or safe.

Discuss and write on the diagram the specific problems each of these creates for the families living there. For example: We cannot grow food in our fields. We have no produce to buy or sell. We have no tools and animals to work our fields. We have no seeds to plant. We go hungry. We don't earn money. People are getting sick from the water. People are too weak from the lack of food and water to rebuild.

Now choose one or two kinds of assistance to rebuild lives. Write these on the area of the diagram marked "Action" and add the positive effects this has on the families in the village or town.



KEY POINTS

Review these four key points

to remember about the causes and effects of malnutrition.
Check your understanding of them and see if your knowledge has improved.

Malnutrition

- Malnutrition is an unhealthy state in which a person's body functions are damaged temporarily or permanently.
 Malnourished people are unable to grow and develop properly, they suffer serious illnesses and can die.
- Underlying much malnutrition in the world is poverty. Poverty and malnutrition affect each other: poverty decreases people's ability to get enough food leading to malnutrition which leads to even more poverty by limiting people's ability to work.
- Any situation that prevents people from getting the food they need, including natural and man-made disasters, can lead to malnutrition.
- Malnutrition causes much suffering to people and their families and leads to great social and economic costs for communities and countries.





Nutritional status: true or false?

Check your understanding of

		True	False
1.	Nutritional status is the condition of the body resulting from the food we eat, our nutritional needs and how our bodies use the nutrients.		o
2.	The most basic foundation of good nutritional status is a good healthy diet.		
3.	Food contains nutrients which help the body function well.		
4.	Most nutrients can be produced by the body.		
5.	Disease and illness do not affect nutritional status.		
6.	Poorly nourished people are as likely to become ill as well-nourished people.		
7.	Lack of food during illness can be a serious threat to the health of a malnourished person.		
8.	Unsafe water and poor living conditions can lead to the spread of disease which affects nutritional status.		٥
9.	Malnutrition never occurs in families with good income.		
10.	Knowledge of our body's dietary needs is important for good health and nutritional status.		
11.	Poor eating habits and beliefs about certain foods can prevent people from meeting their nutritional needs.		۵
12.	Men do not need to learn about nutrition because they are not responsible for preparing foods and caring for children and sick or elderly relatives.		







Fundamental conditions for good nutritional status

NUTRITIONAL STATUS

Complete this work sheet by listing as many examples as you can think of for each of the three fundamental conditions.

Knowledge and care

Health, living conditions and health services

Food and food security

For example:

Food: lack of food that is sufficient in quantity, quality and variety will result in inadequate diet, which leads to poor nutritional status – malnutrition.

Health, living conditions and health services: poor health services and lack of access to medication may cause a person's illnesses to continue, which can interfere with eating and absorbing the nutrients and foods or can increase a person's requirements for nutrients; bad water and sanitation can lead to illness and diarrhoea causing a loss of nutrients.

Knowledge and care: lack of knowledge about foods, good nutrition and individual needs for nutrients can result in poor dietary habits; if the mother has to work many hours outside the home, or work too hard, she may not be able to take care of or nourish her children properly.





to Work sheet example Fundamental conditions

for good nutritional status.

Add any specific examples for each condition.



Fundamental conditions for good nutritional status

Knowledge and care

- Knowing how to make the best food choices.
- Knowing how to share food in the family to meet everyone's needs.
- Sufficient time and knowledge to provide adequate food and care to the family.

NUTRITIONAL STATUS

Food and food security

- Food sufficient in quantity and variety for all family members.
- Safe food, free from contaminants.
- Culturally acceptable.
- Available throughout the year at affordable prices.
- Resources and tools to grow food.

Health, living conditions and health services

- Diseases increase nutrient needs and can decrease appetite and food intake.
- Diarrhoeal diseases increase nutrient losses.
- Lack of sanitation and poor living conditions spread diseases which can increase nutrient needs and decrease nutrient absorption and utilization.
- Health services, such as immunizations, prevent disease and provide treatment of diseases that damage nutritional status.







Malnutrition facts matching

See if you can match each sentence Do you know some basic facts with its correct ending. about malnutrition;

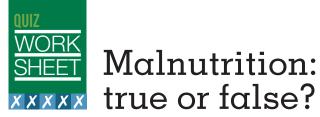
Problems

- Malnutrition is...
- Malnutrition is caused by...
- Malnutrition can lead to economic losses...
- Malnutrition can result in education losses.. 4
- Malnutrition can result in health care costs... Ŋ.
- Malnutrition reduces... ဖွဲ
- A malnourished person...
- Malnutrition...

Malnutrition facts

- ...as those suffering from nutrition-related illnesses need special treatment and care. Ą.
- ...as weakened adults are unable to work.
- ...the quality and enjoyment of life. ບ່
- ...is life-threatening. Ö.
- ...an unhealthy state of a person whose physical functions are temporarily or permanently damaged.
- ...is not able to grow and develop properly. jı;
- ...as children are too weak to attend school and to learn properly. Ċ
- ...poor diets, illness and disease. H





Test your knowledge about malnutrition.

		True	False
	Malnourished people have a strong defence against disease and rarely fall ill.		
2. 1	Malnutrition can lead to death.		
3. 1	Malnutrition reduces people's enjoyment of life.		
7	Malnourished children have the same chances as well nourished children for good jobs and income in the future.	٥	
	Well nourished people are more active members of their families and communities.	□	
I	The combination of too little food and the presence of disease often results in malnutrition, especially in children.	О	
	Most malnutrition in the world is caused by emergencies.		
	Malnourished children are active, able to go to school and learn properly.		
	When a country has malnourished people, its economy grows and develops rapidly.		







Vicious cycle of poverty and malnutrition

Fill out this work sheet with your own ideas about how poverty and malnutrition affect each other.







Vicious cycle of poverty and malnutrition







