



LEARNING OBJECTIVES



*By the end of
the lesson, you
will be able to:*

- know how to choose safe, good foods in the shops and markets;
- recognize the signs of spoiled, poor-quality foods;
- explain how to prepare and store food safely at home.

Lesson 8

Keeping foods safe and nutritious

LESSON OVERVIEW



This lesson is about making sure that the foods we eat are clean, fresh and nutritious. It explains that for us to be healthy and avoid illnesses from contaminated or spoiled food, the food we eat needs to be safe and free from harmful germs, chemicals and other materials. It discusses how choosing good foods to buy and storing and preparing foods safely at home helps protect the safety and quality of what we eat and can help protect our health. Checklists of what to look for to be able to choose safe, good quality foods in the markets and shops are provided, along with tips for protecting the quality and safety of food at home.



Part 1

Food quality and safety in the shops, markets and streets



READING

For us to be healthy and to get the best from our food, the food we eat and the water we drink need to be safe and clean. Fresh and clean foods are important for good nutrition. Foods need to be grown and handled properly so that they provide the best nutritional quality possible. They need to be kept free from harmful germs, chemicals and other materials that can make us sick and harm our health. Bacteria and germs can contaminate food in different ways:

- with soil or water where it is grown
- during handling, preparation, storing, selling and serving
- by dirty hands
- by flies, mice, rats and other insects and rodents
- by cross-contamination (when clean foods touch contaminated foods or surfaces).

Eating contaminated food can result in illness (diarrhoea, vomiting, upset stomach, fever or cramps) caused by bacteria in the food. Most illnesses from eating contaminated or spoiled food can be avoided if food is handled, prepared, cooked and stored properly and if basic cleanliness and personal hygiene practices are followed.

It is important to protect the safety and quality of the foods we eat at all times. Food needs to be kept safe during growing, harvesting, moving from the field, processing, storing, selling, and finally preparing and eating it. Knowing how to choose good foods in the shops and how to store and prepare food safely at home can protect the safety and quality of what we eat and can help protect our health.

Shops, markets and other food sellers can take many actions to keep food free from harmful germs, insects, pests and other sources of harmful contamination. Some countries have laws that regulate and inspect stores, markets and street food vendors to be sure that proper food safety procedures are being followed. Everyone should know some of the basic handling and selling procedures that can help keep food safe and of good quality and be sure that these procedures are being followed before buying food. It is best to buy foods from shops or markets that can be trusted to sell safe foods and that provide a good setting and clean conditions for the foods they sell.

TO THINK ABOUT WHILE READING



Do all shops, markets and street stalls sell safe and good quality food?

What conditions should people check for in the markets and shops?










What are the signs of spoiled, poor quality food?



When selecting foods to buy, check their freshness, appearance, variety, quality and price, but also pay attention to the cleanliness of the shop, the vendor and the surroundings in which the food is being sold. The personal hygiene of food sellers is very important. Their clothing and hands should be clean and washed frequently.





MATERIALS

-  Fact sheet *Basic conditions for selling food*
-  Fact sheet *Choosing good quality foods*
-  Match it work sheet *What to look for when buying food*
-  Into the field work sheet *Food safety inspection – fresh fruits and vegetables*
-  Into the field work sheet *Food safety inspection – dry, non-perishable foods*
-  Into the field work sheet *Food safety inspection – fresh, perishable foods*
-  Fact sheet *Recognizing the signs of poor quality foods*
-  Quiz work sheet *Recognizing the signs of good or spoiled foods*
-  Into the field work sheet *School canteen inspection*

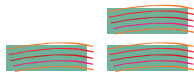


ACTIVITIES

What to look for when buying food

-   Review the Fact sheet *Basic conditions for selling food*, then go to the Match it work sheet and match the beginning of each condition with its correct ending.

Food safety inspection



If you are working alone, visit a market, a grocery store or a street stall and fill in the Into the field work sheets *Food safety inspection – fresh fruits and vegetables*, *Food safety inspection – dry, non-perishable foods* and *Food safety inspection – fresh, perishable foods* to see if food safety rules are observed.

If you are working as a class, divide into three groups and review the rules on storing and selling of:

- Group 1. Fresh fruits and vegetables
- Group 2. Dry foods such as flour, grains, legumes
- Group 3. Fresh foods such as milk, meat, fish, eggs.



Visit your local markets, grocery stores or street stalls to see if these rules are observed and what can be done to improve the way foods are stored and sold. Fill in the Into the field work sheets during your food safety inspection. Create a presentation for the parents, teachers, officials and other community members and share with them the results of your investigation.

Recognizing signs of good or spoiled food



Review the Fact sheet *Recognizing signs of poor quality foods*. Then take a quick quiz to see if the foods listed are likely to be safe or unsafe to eat.

Inspect your school canteen



Imagine you have been asked to inspect your school canteen or cafeteria. Collect as much information as possible using the Into the field work sheet *School canteen inspection*. Write a brief report based on the information you gathered and present it to your school.

Food safety rules and laws

Find out what local or national rules and laws regulate the handling and selling of foods in the markets, stores, streets in your area.

- Are the shops and markets inspected often?
- How are the rules enforced?
- How can people be sure the rules are followed?
- What can people do to report problems and violations?
- What can people do if the rules are not sufficient or if there are no rules and regulations?
- How can individuals and community groups work with local authorities to improve the situation?

KEY POINTS

Review these three key points to remember about food safety in the shops and markets. Apply this knowledge to your own food shopping and share it with others.

Food safety in the shops and markets

- For us to be healthy and to get the best from our food, the shops and markets need to sell good quality, safe food free from harmful germs, insects, pests and other harmful sources.
- When choosing where to shop, people should pay attention to the cleanliness of the shop, the vendor and the surroundings in which the food is being sold and check that basic rules of food safety and hygiene are being followed.
- Consumers can protect their health by choosing and buying unspoiled, good quality foods and learning to recognize signs of spoiled food.



Part 2

Protecting the quality and safety of food at home



READING

Preparing and cooking food properly can help protect the nutrients in foods. Nutrients are affected by contact with air, heat, light and chemicals. It is important to cook foods with sufficient heat to kill harmful bacteria, but it is also important not to destroy the nutrient content of foods by overcooking. When foods are boiled for a long time, the important nutrients dissolve in the cooking water. If the cooking water is poured down away and not eaten, fewer nutrients will be consumed. Cooking and eating food properly and cooking will help ensure the nutritional quality and safety of all meals prepared for the family.

**Food
quality
and
safety**

Preserve the nutrients

- Cook or reheat food properly, avoiding overcooking which can destroy nutrients.
- Cook and eat vegetables the same day you purchase or pick them and try to choose them at their peak of ripeness.
- Prepare and cut vegetables right before they are cooked or eaten, rather than preparing them in advance and then leaving them exposed to the air or sitting in water.
- Cook or steam vegetables with as little water as possible, rather than boiling them.
- Save the water in which food was cooked, especially vegetables, meats, fish and legumes, and add it to sauces or soups.
- Cook vegetables and other foods in a soup or stew and eat the broth.
- Serve and eat vitamin A-rich plant foods with some fat to help improve absorption of vitamin A. For example, eat pumpkin and carrots with a small amount of oil.
- Prepare and eat iron-rich plant foods with vitamin C-rich foods to help absorption. For example, eat leafy green vegetables and salads with the juice of a lemon.

**TO THINK
ABOUT
WHILE
READING**



Do you know how to protect the nutrients in foods?

Do you prepare and cook food properly?

Do you store food correctly?






Preparing and storing foods properly at home can help prevent spoiling and wasting food. The proper preparation and storage of foods for short or long periods of time before or after cooking will help preserve the nutrient content of foods and keep food safe to be eaten at another time. The biggest threat to food safety is harmful bacteria that can contaminate and grow in food. Some of the harmful substances in contaminated food can be passed on to other foods they



come into contact with. While some different practices are needed for different types of foods, all foods must be kept clean and free from foreign particles such as glass or metal, contamination by harmful chemicals and from bacteria, viruses and parasites.






MATERIALS

-  Fact sheet *Prepare and cook food properly*
-  Fact sheet *Store food properly*
-  Match it work sheet *Tips on how to preserve nutrients in foods*
-  Into the field work sheet *Household food safety inspection*
-  Work sheet *Jumbled foods*




ACTIVITIES


Tips on how to preserve nutrients in foods

-   Review the Fact sheets *Prepare and cook food properly* and *Store food properly*. Discuss or think about the best cooking methods to avoid nutrient losses. Then go to the Match it work sheet and match the beginning of the sentences with their correct endings.
- 

Can your home pass a food safety inspection?

-  Inspect your home kitchen area and places where you store food and fill in the Into the field work sheet *Household food safety inspection*. What can you do to improve the way food is prepared and stored in your home?

Jumbled food

-  Go to the *Jumbled food work sheet*, unjumble the foods and try to work out where and how they should be stored.

Role-play: Storing food correctly

Group activity

Write the names of locally available foods or draw them on small cards. Be sure to include several foods from each of these groups: **1.** milk, cheese, yogurt raw meat, poultry, eggs, raw fish **2.** fresh fruit and vegetables **3.** rice, dry beans, canned peas, sugar, flour, a bottle of oil, a jar of jam, a can of tomato sauce, bread.



Divide into small groups and role play a family shopping for food. Each group selects food cards representing the foods they want to buy for their family. They pay for their purchases and now need to pack them for carrying home. Ask the players to divide the food cards into separate shopping bags or baskets according to the good handling practices they have learned. Can all the food go in the same bag? Do any foods need to be kept separate?

Now imagine the family are unpacking the shopping bags at home. Ask the players to take out one food at a time and discuss how each food should be stored.

- Does it need to be stored in the freezer?
- Does it need to be kept cool in the refrigerator?
- Where in the refrigerator should it go?
- Does it need to be kept separated from other foods?
- Does it need special wrapping? or containers?
- Can it be stored in cupboards?
- Do any foods need special packaging?
- How should raw and cooked foods be stored?



KEY POINTS

Review these three key points to remember about food safety at home. Apply this knowledge to your own food preparation and storage and share it with others.

Food safety at home

- Keeping foods clean and practising good personal hygiene during food preparation is very important to avoid contamination with harmful bacteria and prevent the spread of disease.
- Foods need to be cooked enough to make them safe to eat but not too much to destroy their nutrients.
- Storing foods properly at home will help protect their quality and safety and avoid wasting food.



Basic conditions for selling food

When shopping for your food, always check that...

- ✓ **The shop**, area, space and surroundings are **clean and free of rubbish**.
- ✓ **Shelves and display** areas are kept **clean**.
- ✓ **Food** is kept **off the floors**.
- ✓ **Food** is stored in airtight, **covered containers** and protected from moisture, insects, rodents and other pests.
- ✓ **Different kinds** of foods, such as eggs, meat, fish and vegetables, are kept **separated from each other**.
- ✓ Foods are kept at **appropriate temperatures**.
- ✓ **Hot foods** are kept **hot**.
- ✓ Foods that need **refrigeration** are kept sufficiently **cold**.
- ✓ **Frozen foods** are kept **frozen**.
- ✓ **Foods** are kept **separated from non-food items** (such as cleaning products).
- ✓ Foods that have **expired** or spoiled are **removed promptly**.
- ✓ **Food handlers** and preparers have access to **hand washing** facilities (clean water and soap) and **use gloves** to handle food.



★ This will help you complete
the Work sheet What to look for when buying food

Choosing good quality foods

Fresh fruits and vegetables should be kept at cool temperatures, in a cool and dry place. Fruits and vegetables lose their nutrients and spoil easily and need to be handled carefully to protect their freshness and quality. They should be fresh and not soft or limp, and should not have spots or other signs of damage, spoilage or insects.

In the shop or market:

- ✓ They should be kept off the ground and out of the sun.
- ✓ They should be touched as little as possible, using disposable gloves if possible.
- ✓ Spoiled fruits and vegetables should be separated and promptly removed from bins, boxes or shelves where they are stored and displayed.
- ✓ Packaged fruits and vegetables should have no signs of moisture, dirt, insects or other foreign objects inside.

Dry, non-perishable foods, such as flour, salt, sugar, legumes (beans, lentils), grains (rice, maize, oats) and seeds should be kept in a dry, clean place free from insects, rodents or other animals.

When these foods are sold from large, open containers or sacks in the shop or market:

- ✓ The place of sale should be clean.
- ✓ The food should be kept off the ground and covered with a cover or a cloth.
- ✓ The container should be suitable for foods and used only for this purpose.
- ✓ The container should be clean and without holes or perforations.
- ✓ The scoop or dispenser should be clean and for exclusive use (only for that product).

When they are sold already packaged in bags, boxes or other containers:

- ✓ The package should be intact (whole) and in good condition.
- ✓ The package should be free from cracks, tears and holes.
- ✓ There should be no signs of dirt, mould or moisture on the package.
- ✓ The expiration date or sell-by date on the package should not be past.



Fresh, perishable foods, such as milk and milk products, raw meats and offal, and eggs must be stored under refrigeration, in compartments separated by product type:

When these foods are sold unpackaged from large containers or display areas:

- ✓ The container or area should be used exclusively for that food item; the space should not be shared with or used by other foods
- ✓ The container or area should be kept clean and covered
- ✓ The dispenser should be clean and for exclusive use
- ✓ The smaller containers, bottles, paper or other packaging into which the food is put for taking home should be clean and used only for that food item

When they are sold already packaged in bags, boxes or other containers:

- ✓ The package should be intact and in good condition
- ✓ The package should be free from cracks, tears and holes
- ✓ There should be no signs of dirt, mould or moisture on the package
- ✓ The expiration date or sell-by date on the package should not be past.



You can use this as a pocket guide to help you choose good quality food when you are shopping for food

What to look for when buying food

See if you can match the beginning of the sentence on the left with its correct ending on the right.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. The shop, its shelves and display areas should be 2. The food should not be stored 3. The food should be protected from 4. The food should be stored 5. Such foods as 6. Hot foods should be kept 7. Foods that need refrigeration should be 8. Frozen foods should be 9. Foods should be separated from non-food items 10. Expired or spoiled foods 11. Food handlers and preparers | <ol style="list-style-type: none"> A. frozen. B. should be removed promptly. C. in airtight, covered containers. D. should wash hands frequently and use gloves to handle food. E. hot. F. moisture, insects, rodents and other pests. G. clean and free of rubbish. H. on the floor. I. sufficiently cold. J. such as cleaning products. K. meat, fish, eggs and vegetables should be separated from each other. |
|---|--|



Answer key: 1.G, 2.H, 3.F, 4.C, 5.K, 6.E, 7.I, 8.A, 9.J, 10.B, 11.D

Food safety inspection – fresh fruits and vegetables



Visit a local market, grocery store or street stall and observe the conditions for selling fruits and vegetables.
Are the basic food safety rules being followed?
Fill in the work sheet with your observations and suggestions.

Fresh fruit and vegetables are...	Yes	No	Suggestions for improvement
...kept at cool temperatures	<input type="checkbox"/>	<input type="checkbox"/>
...kept in a dry place	<input type="checkbox"/>	<input type="checkbox"/>
...kept off the ground	<input type="checkbox"/>	<input type="checkbox"/>
...kept out of the sun	<input type="checkbox"/>	<input type="checkbox"/>
...touched as little as possible, using disposable gloves	<input type="checkbox"/>	<input type="checkbox"/>
...spoiled fruits and vegetables are promptly removed	<input type="checkbox"/>	<input type="checkbox"/>
...packaged fruits and vegetables have no signs of moisture, dirt, insects, etc.	<input type="checkbox"/>	<input type="checkbox"/>



Food safety inspection – dry, non-perishable foods



Visit a local market, grocery store or street stall and observe the conditions for selling dry foods, such as flour, grains and legumes. Are the basic food safety rules for these foods being followed? Fill in the work sheet with your observations and suggestions.

Foods such as flour, salt, sugar, legumes, grains, seeds are...	Yes	No	Suggestions for improvement
...kept in dry, clean places free from insects and animals	<input type="checkbox"/>	<input type="checkbox"/>
...containers and sacks are kept off the ground and covered with a cover or a cloth	<input type="checkbox"/>	<input type="checkbox"/>
...containers are suitable for foods and used only for this purpose	<input type="checkbox"/>	<input type="checkbox"/>
...containers are clean and have no holes	<input type="checkbox"/>	<input type="checkbox"/>
...the scoop is clean and used only for that product	<input type="checkbox"/>	<input type="checkbox"/>
...the packages are whole, have no cracks, tears and holes	<input type="checkbox"/>	<input type="checkbox"/>
...there are no signs of dirt, mould or moisture on the packages	<input type="checkbox"/>	<input type="checkbox"/>
...the expiry date or sell-by date on the packages is not past	<input type="checkbox"/>	<input type="checkbox"/>



Food safety inspection – fresh, perishable foods



Visit a local market, grocery store or street stall and observe the conditions for fresh foods such as milk, meat, eggs and fish. Are the basic food safety rules for these foods being followed? Fill in the work sheet with your observations and suggestions

Foods such as milk, raw meats, eggs are...	Yes	No	Suggestions for improvement
...kept refrigerated	<input type="checkbox"/>	<input type="checkbox"/>
...stored separated by product type	<input type="checkbox"/>	<input type="checkbox"/>
...unpackaged foods are sold in the area used exclusively for that food item	<input type="checkbox"/>	<input type="checkbox"/>
...containers and area are kept clean and covered	<input type="checkbox"/>	<input type="checkbox"/>
...the dispenser is clean and used only for that food item	<input type="checkbox"/>	<input type="checkbox"/>
...packaged foods are intact, the packages are free from cracks, tears and holes	<input type="checkbox"/>	<input type="checkbox"/>
...there are no signs of dirt, mould or moisture on the packages	<input type="checkbox"/>	<input type="checkbox"/>
...the expiration date or sell-by date on the packages is not past	<input type="checkbox"/>	<input type="checkbox"/>



Recognizing the signs of poor quality foods

Food

Signs of poor quality

Cereals and other dry foods

Presence of insects, dirt, stones or other objects in the product.
Product is wet, damp, or has spots of colour or mould.
Change in appearance of product, such as lumps in flour or wrinkles in legumes.
Bag or package is open, torn or broken.
In packaged products, the expiry date or best-by date has passed.

Roots

Product is soft, not firm, or has sprouts.
Has bruises, rotten spots or other signs of damage or spoilage.

Vegetables and fruits

Show signs of general softness or wilting, soft spots, rotten spots or other kinds of damage spots.

Meat and poultry

Have a bad smell or strange colour. In meats, liver and other organs: strong smell or unusual colour.

Fish

Bad smell. Soft flesh, instead of firm. Dull eyes; dry, dull and loose scales, gills or fins.

Eggs

To test an egg for freshness:
Wash the egg in clean water and throw away the wash water.
Gently place the clean egg (without dropping it) in a large bowl of clean water. If the egg sinks on its side to the bottom, it is fresh. If the egg floats instead of sinking, it is not good and should be thrown away.

Milk and milk products

Product has a bad smell, unusual taste or has been exposed to dirt, flies or other insects.
Products needing refrigeration or cool temperatures that have not been kept adequately cool may be spoiled.
In packaged products, the expiry date or best-by date has passed.

Canned foods

Can is swollen, bulging, dented, rusty or has other signs of damage inside or outside.
Food has leaked out of the can.
When the can is opened, food looks, smells or tastes bad.
The expiry date or best-by date has passed.



You will need to use this to complete the Work sheet *Recognizing signs of good or spoiled food*

Use this as a guide to see if food is spoiled at home or in the shops.

Recognizing the signs of good or spoiled foods

**How do you know if food is safe to eat?
See if you can tell which foods are safe
or unsafe.**

	Safe	Unsafe
1. A jar of tomato sauce is leaking.	<input type="checkbox"/>	<input type="checkbox"/>
2. The potato is soft with sprouts.	<input type="checkbox"/>	<input type="checkbox"/>
3. There is mould in a canned product.	<input type="checkbox"/>	<input type="checkbox"/>
4. The egg does not sink to the bottom, but floats in a bowl of water.	<input type="checkbox"/>	<input type="checkbox"/>
5. Bread is freshly baked, hot and just from the oven.	<input type="checkbox"/>	<input type="checkbox"/>
6. Meat looks grayish and has an unpleasant smell.	<input type="checkbox"/>	<input type="checkbox"/>
7. The package of biscuits is damp.	<input type="checkbox"/>	<input type="checkbox"/>
8. Nothing has leaked from the can.	<input type="checkbox"/>	<input type="checkbox"/>
9. Milk smells sour and has lumps in it.	<input type="checkbox"/>	<input type="checkbox"/>
10. Liquid spurts out when the jar is opened.	<input type="checkbox"/>	<input type="checkbox"/>
11. The use-by date has passed.	<input type="checkbox"/>	<input type="checkbox"/>
12. When you open a can, the food looks, smells and tastes good.	<input type="checkbox"/>	<input type="checkbox"/>
13. Mould is growing on the orange.	<input type="checkbox"/>	<input type="checkbox"/>
14. Jar lid is firmly sealed and curved inward.	<input type="checkbox"/>	<input type="checkbox"/>



	Safe	Unsafe
15. The flour is dry and has no lumps in it.	<input type="checkbox"/>	<input type="checkbox"/>
16. The can shows signs of rust.	<input type="checkbox"/>	<input type="checkbox"/>
17. The fish has a fresh smell of the ocean, bright eyes, firm flesh, bright colour scales and gills.	<input type="checkbox"/>	<input type="checkbox"/>
18. The tomato is soft, dull and faded, has soft and rotten spots.	<input type="checkbox"/>	<input type="checkbox"/>
19. The can is swollen, bulging.	<input type="checkbox"/>	<input type="checkbox"/>
20. The box of rice has holes in it.	<input type="checkbox"/>	<input type="checkbox"/>
21. Onions are soft and have yellow sprouts.	<input type="checkbox"/>	<input type="checkbox"/>
22. Green leafy vegetables are green, crispy and fresh.	<input type="checkbox"/>	<input type="checkbox"/>

Continue this list with your own examples of commonly eaten foods.

Answer key: 1 unsafe, 2 unsafe, 3 unsafe, 4 unsafe, 5 safe, 6 unsafe, 7 unsafe, 8 safe, 9 unsafe, 10 unsafe, 11 unsafe, 12 safe, 13 unsafe, 14 safe, 15 safe, 16 unsafe, 17 safe, 18 unsafe, 19 safe, 20 unsafe, 21 unsafe, 22 safe



School canteen inspection

Carry out an inspection of your school canteen or cafeteria. Record your observations and suggestions on the work sheet. Present the findings of your inspection to the school.



	Yes	No	Suggestions
Food handlers			
• wear clean clothing	<input type="checkbox"/>	<input type="checkbox"/>
• tie their hair back or cover it with a hat	<input type="checkbox"/>	<input type="checkbox"/>
• wash their hands with clean water and soap	<input type="checkbox"/>	<input type="checkbox"/>
• sneeze and cough on food	<input type="checkbox"/>	<input type="checkbox"/>
• the same person who handles your food also deals with the money.	<input type="checkbox"/>	<input type="checkbox"/>
Cleanliness of your school canteen			
• the canteen is kept clean	<input type="checkbox"/>	<input type="checkbox"/>
• safe drinking water is always available	<input type="checkbox"/>	<input type="checkbox"/>
• there is a clean bathroom	<input type="checkbox"/>	<input type="checkbox"/>
• rubbish is kept in a covered bin	<input type="checkbox"/>	<input type="checkbox"/>
• the bin is emptied frequently	<input type="checkbox"/>	<input type="checkbox"/>
Food preparation			
• food preparation surfaces and utensils are clean	<input type="checkbox"/>	<input type="checkbox"/>
• clean, carefully washed pans and utensils are used to prepare food	<input type="checkbox"/>	<input type="checkbox"/>
Serving food			
• display areas are kept clean	<input type="checkbox"/>	<input type="checkbox"/>
• clean plates and utensils are used to serve food	<input type="checkbox"/>	<input type="checkbox"/>
• plates and utensils are protected from flies and dust	<input type="checkbox"/>	<input type="checkbox"/>
Food storage			
• food shelves are kept clean	<input type="checkbox"/>	<input type="checkbox"/>
• foods are stored in clean, covered containers	<input type="checkbox"/>	<input type="checkbox"/>
• foods that need refrigeration are kept cold	<input type="checkbox"/>	<input type="checkbox"/>
• frozen foods are kept frozen	<input type="checkbox"/>	<input type="checkbox"/>



Prepare and cook food properly

When preparing or cooking food,
always be sure to...

- **Use clean water** to prepare and cook foods.
- Keep the **kitchen clean**. Use hot, soapy water to clean all kitchen surfaces.
- **Wash hands** well with soap and clean water before working with food and before eating.
- **Avoid drinking, smoking and eating** while preparing and cooking food. Also avoid sneezing or coughing on food and scratching or touching the head and body.
- Keep food preparation **surfaces and utensils clean**. Prepare food on a clean surface such as a table. Use clean, carefully washed dishes and utensils to store, prepare, serve and eat food.
- **Wash pots, bowls, dishes** and utensils (knives, spoons, forks) **immediately after use** and store in a clean place protected from flies and dust.
- **Cover all foods** to keep flies, dust and dirt away.
- **Wash well** with hot water and soap **all surfaces** touched by **raw animal foods**.
- **Prevent raw meat**, offal, poultry and fish **from touching other foods**, as these foods when raw or uncooked often contain harmful germs that can be passed on to other foods.
- **Cook animal foods** well to kill harmful germs.
- **Wash vegetables and fruits** with clean water. Peel if possible.
- **Boil eggs** so they are hard. Do not eat raw or cracked eggs.
- **Boil milk** unless it is from a safe source or already pasteurized.
- **Do not taste** food that you think may be **spoiled**.
- **Throw out foods** with **bad odours**, but be aware that many harmful germs in foods are odourless and tasteless.
- **Throw out foods** that **are mouldy**, rotting or have an unusual colour or smell.
- Keep **rubbish** in a **covered** bin and empty frequently.



★ You can copy this and keep it handy in your kitchen or cooking area.

★ This will help you complete the Work sheet **Tips on how to preserve nutrients in foods**

Store food properly

When putting away and storing foods,
always remember that...

- **All foods** should be **stored in clean, closed containers** off the ground and protected from moisture to avoid contamination by pests and mould. Food that becomes mouldy in storage is highly toxic and should never be eaten or fed to animals.
- Foods that have become discoloured, mouldy, or decayed or that have been contaminated by insects or rodents should be **thrown away**.
- **Food containers** should be used **exclusively for food** and should never be used for storing other substances.
- **Disposable containers** should **never be reused**.
- Store **raw food**, especially meat, **away from cooked foods**.
- **Meat, fish and milk** should be stored for only a few days and must always be **kept cool or refrigerated** to prevent dangerous spoilage.
- **Eggs** should be kept cool and refrigerated in unbroken shells, and in closed containers, if possible. Properly stored eggs can be kept for several weeks.
- **Fresh fruits and vegetables** should be stored at cool temperatures or refrigerated. They should be kept only for short periods of time, as they start to lose nutrients immediately after picking or harvesting. Soft fruits like peaches and leafy vegetables like lettuce and greens are especially fragile and spoil more quickly.
- **Roots and tubers**, such as potatoes, yams, cassava and taro, can be stored for several months if they are kept in a dark, cool, dry place away from insects or rodents.
- **Grains and legumes**, such as rice, flour and beans, kept in clean, tightly closed, dry containers can be stored for long periods of time.
- **Cooked food** should not be kept for more than two hours without being in a very hot or very cool place, or refrigerated. Cooked food should be stored in **clean, tightly closed, clearly marked food containers**.
- Cooked foods should be kept hot or consumed in a short period of time (one to two hours); if not, they **should be refrigerated**.
- **Leftover** cooked foods should be **reheated thoroughly** until very hot before eating and should be **kept covered** and refrigerated for no more than 1-2 days.
- **Foods like sliced**, processed meats should be **kept cool** and should not be left out for more than two hours.



★ This will help you complete the Work sheet Tips on how to preserve nutrients in foods

★ You can copy this and keep it handy at home where you store foods.

Tips on how to preserve nutrients in foods

1. Cook and eat vegetables
2. Avoid overcooking
3. Choose vegetables
4. Do not prepare and cut vegetables
5. Do not leave vegetables
6. Add the meat, fish or vegetable broth
7. Cook or steam vegetables with
8. To help absorption of iron
9. To improve absorption of vitamin A

- A. soaked in water or exposed to the air.
- B. the same day you buy or pick them.
- C. serve orange vegetables, like carrots, pumpkin and squash with some fat.
- D. which destroys nutrients.
- E. as little water as possible.
- F. at their peak of ripeness.
- G. to sauces or soups.
- H. in advance, do it right before eating.
- I. prepare leafy green vegetables with vitamin C-rich foods.



Answer key:
1B, 2D, 3E, 4H, 5A, 6G, 7E, 8I, 9C

Do you know how to avoid losing nutrients when cooking and preparing food? Test your knowledge by matching the beginning of the each sentence on the left with its correct ending on the right.

Household food safety inspection

**Can your home pass a food safety inspection?
Inspect the areas where you cook and store food in
your home.
Record your findings and observations on the
work sheet.
See how you can improve food safety in your home.**

Is your home well organized for food storage?	Yes	No	Suggestions for improvement
Are there special areas for food items?	<input type="checkbox"/>	<input type="checkbox"/>
Are there any unsafe places of food storage?	<input type="checkbox"/>	<input type="checkbox"/>
Do you wash your hands with soap and hot water before and after touching food?	<input type="checkbox"/>	<input type="checkbox"/>
Do you change dirty cloths and kitchen towels frequently?	<input type="checkbox"/>	<input type="checkbox"/>
Do you direct your sneezes away from the food and wash your hands afterwards?	<input type="checkbox"/>	<input type="checkbox"/>
Do you wash cutting boards, knives, tables, plates and other utensils with soap and hot water after use, especially with raw meat, fish, poultry and eggs?	<input type="checkbox"/>	<input type="checkbox"/>



Is your home well organized for food storage?	Yes	No	Suggestions for improvement
Do you cook meat, fish, poultry thoroughly?	<input type="checkbox"/>	<input type="checkbox"/>
Do you keep perishable foods adequately cool?	<input type="checkbox"/>	<input type="checkbox"/>
Do you keep your kitchen counter, table, fridge and utensils clean and remove the spills immediately after they happen?	<input type="checkbox"/>	<input type="checkbox"/>
Do you serve foods on clean plates and store them in clean containers?	<input type="checkbox"/>	<input type="checkbox"/>
Do pets (cats, dogs, etc) jump and walk on your kitchen table, fridge, cupboards?	<input type="checkbox"/>	<input type="checkbox"/>





Jumbled foods

Unjumble the foods listed in the left column of the work sheet and write the name of the food in the second column.

Then, for each food, record in the appropriate column the type of container, best storage place and temperature for that food to keep it fresh and safe.

Jumbled food	Unjumbled food	Type of container	Storage place	Temperature
ATEM
KIML
RULOF
OTPOTA
ERCI
SLINETL
SIHF
OMTOTA
ESHECE



Answer Key: meat, milk, flour, potato, lentils, fish, tomato, cheese, rice