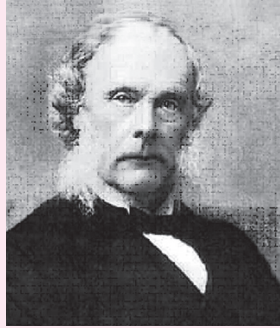


■ **Reading**

Discovery of Antiseptics



Joseph Lister



Carbolic Steam Spray

Joseph Lister was born in Upton, Essex, in England in 1827. He was educated at the universities of London and Edinburgh. In 1856 he became a surgeon in the Edinburgh Royal Infirmary (hospital). In 1861 he was appointed surgeon of the Glasgow Royal Infirmary in a new surgery unit designed to reduce gangrene and other infections. At that time it was very dangerous to go to hospitals for surgery. One famous doctor said that it was more dangerous to go to hospitals for surgery than to be a soldier in war. **This** was because many died from infection. Despite his efforts to keep surgical instruments and rooms clean, the mortality rate remained close to 50 percent.

In 1865, he came upon the germ theory of the French bacteriologist Louis Pasteur, whose experiments revealed that fermentation and putrefaction were caused by micro organisms brought in contact with organic material. Believing infection to be caused by airborne dust particles, Lister sprayed the air with carbolic acid, a strong disinfectant and a chemical that was then being used to treat foul-smelling sewers. **He** also told his surgeons to use **it** to wash their hands and equipment before surgery. Lister reduced surgical mortality to nearly 12 percent by 1869. Lister wrote about his methods of using disinfectants in an important medical journal. Many people didn't believe him. He had to spend many years talking to people and writing about his ideas. At last they agreed with him.

In 1877, he became a professor of surgery at King's College Hospital in London. In 1897 Queen Victoria, who had been one of his patients, made him Baron. In 1902 Edward VII, the king of England gave him an award. By the time Lister died, in 1912, doctors all over the world were using **his** methods to prevent infections.

Activity 3.12 Comprehension

■ *Reading/ Writing*

- a. 1. When and where was Joseph Lister born ?
2. What universities did Joseph Lister attend ?
3. Where did he get his first appointment ?
4. What was the task given to him at Glasgow Royal Infirmary ?
5. Why did people consider going to hospitals for surgery more dangerous than to be a soldier at war ?
6. What was the death rate at that time ?
7. What is the theory put forward by Louis Pasteur ?
8. What could be the cause for infection according to doctor Lister?
9. What was the easy solution he found to overcome infection at surgery ?

- b. 1. Write 3 rules you would write for the sick room in your school.
2. Write three native antiseptics, which are used by Sri Lankans.

Activity 3.13

■ *Writing*

Match the words in A with their meanings in B and write in your writing book.

A	B
surgeon	A member of the lowest order of the British nobility
infirmery	A chemical liquid that destroys bacteria
gangrene	Decay or rot and produce a foul smell
infections	The chemical breakdown of a substance by bacteria
despite	Make known
mortality rate	A person who studies about bacteria
bacteriologist	The number of deaths in a given year or period
revealed	In spite of
fermentation	The state of being infected.
putrefaction	Death of body tissue due to bacterial infection
disinfectant	A hospital
baron	A medical practitioner qualified to do surgery

Activity 3.14

■ *Reading/ Writing*

Refer to activity 3.13 and write the meanings of the following words. Copy the grid into your writing book.

Words	Meanings
despite	
bacteriologist	
revealed	
putrefaction	
baron	
disinfectant	

Activity 3.15

■ *Reading/ Writing*

Read “Discovery of Antiseptics.” Find what the words and phrases in bold type refer to. Copy the grid onto your book and fill it in.

The word/s	line	Refer/s to
This	8	
it	15	
He	15	
His	Last line	

Activity 3.16

■ *Writing*

Look in the text for information to complete the following grid. Copy the grid onto your book and fill it in.

Surgeon's name	
The year of birth	
His birth place	
The problem	
The experiment	
His most important discovery	
The year of his death	

Activity 3.17 Group Work

■ Writing

Find similar information about another famous person in Sri Lanka and write his biography taking the text as a model. Present it in the wall magazine.

Grammar

Activity 3.18

Do this activity to revise your knowledge on nouns, adjectives and verbs.

Look at the list of phrases below. Then write the word/s in bold in the proper column in your writing book.

A **balanced** diet / a **high-calorie** food/ some **calories** / He **invented** it. /
many **nutrients** / **surgical** equipment/ a bad **infection** / an **injured** soldier/
he **discovered** germs/ a **wound**/ It **stores** energy/ a good **surgeon**/ the
wounded man/ bad **hygiene**/ a strong **disinfectant**

<i>Adjectives</i>	<i>Nouns</i>	<i>Verbs</i>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Activity 3.19 Pair work

■ *Speaking / Writing*

Write answers to the following questions in your writing book.

1. What do you usually have for your breakfast? Is your diet balanced?
2. How does a balanced / unbalanced diet affect your performance?
3. Write a balanced diet suitable for children of your age with the help of the food pyramid and the tips given above on page 58.

Group work

Study the food label given below. Write a short paragraph about making chappathy in your writing book. The following questions will help you.

1. What do the labels tell you about the product?
2. Why do we need to have this information?
3. As a consumer how can we use the information provided in the label?



■ *Reading*

The new diseases, as well as change in our style of living have exposed us to new dangers. Urban life has also increased our exposure to illness.

Sri Lanka has a rich variety of vegetables and fruits. Greens are a plenty in our country. However it is not easy to make greens safe for eating. **If over cooked, their value, as a food is lost. Therefore, they have to be washed thoroughly to make them clean.** It is necessary to learn how to wash greens. Greens must always be washed with plenty of water. Water that gets clogged between the stem of a leaf and the trunk can trap the impurities.

Some germs have a lot of resistance. Meat has to be cooked very well. We have to be careful with the knives and the boards used for cutting meat, especially chicken. Washing the knife and board alone does not help. Therefore it is best to keep the knife and board used for meat separate. The same board and knife should not be used for preparing salads. Any germ left over on the board or knife may enter the salad. This practice is very important when there is an epidemic such as the bird flu.

The refrigerator is the most common way of saving left-over food in urban homes. However not all households follow the safety precautions. It is not good for health to eat heated frozen food. What must be done is to take out what is required for the meal, allow it to thaw at room temperature, and then only heat it if necessary.

Activity 3.20

■ *Writing*

List out the safety precautions that you should follow in preparing vegetables and meat. Write in your writing book.

Vegetables

Meat

Activity 3.21

■ *Speaking / Writing*

“The heart of a country’s economy is in the kitchen.”

- a. Do you agree to the above statement. Give reasons to say why you agree/ disagree. List the ways and means of economizing in the kitchen.
 - bulk buying
 - cooking the exact amount
 - saving a fistful of rice for future use

b. With the information from the list, prepare a presentation on “ways and means of economizing in the kitchen.” You may use the following to present your ideas to the class.

As I see/ in my opinion/ without any question/ according to the given information/ no help at all/ however/ to cut short/ to sum up/ finally/ to start with / taking the second point into consideration

Activity 3.22 Group work

■ *Speaking/ Writing*

Here are pictures of a traditional kitchen and a modern kitchen.



Read the names of utensils found in a kitchen. Categorise them under the following headings. Copy the table into your exercise book and fill the columns. Add some more words into each column.

Traditional kitchen	Modern kitchen	Both

- Wincwing fan
- sieve
- motar and pestle
- grinding stone
- coconut scraper
- spoons
- mats
- clay pot
- spoon hanger
- work top
- sink
- grinder
- rolling pin
- chopping board
- grater

Activity 3.23 Group work

■ *Writing*

Write a paragraph describing the activities connected with the preparation of the following food: rice, coconut sambol, vegetable salad, meat or fish curry.

eg: Rice
Measure the required quantity.
Wash and put into a pot and add the correct amount of water
Let the rice get cooked

Activity 3.24 Group work

■ *Speaking*

Prepare your notes on the following and select the group leader. Do the presentation. Make a presentation on

- Select any food item you like and explain the process of preparation in five stages.
- Explain why the kitchen should be clean.

Use the following words in giving reasons: because, as, therefore, etc.

You may begin :

It is extremely necessary to keep the kitchen clean and well organised, because it will help you save time

Activity 3.25

■ *Vocabulary*

a. Find the dictionary meanings of the following words.

chef, culinary art, pantry, chopper, oven, buffet, barbecue, gourmet, flavour

b. In groups, attempt making as many words as possible out of the above words.

Example-

Pantry = Pan/ try/ ant/ pay/ tan/ ran/ any

Food preservation

■ *Reading*

Some common methods used to preserve food in various countries

Food preservation is the process of treating and handling food in such a way as to stop spoilage, to prevent food borne illnesses while maintaining nutritional value, density, texture and flavour. Preservation usually involves preventing the growth of bacteria, fungi, and other micro organisms.

Common methods applied to preserve food are **drying**, spray drying, **freezing**, **canning**, **preserving in syrup**, sugar crystalization, food irradiation, **adding preservatives** or inserting gases.

Certain methods of preserving food not only help to preserve food but also add flavour. They are pickling, salting, smoking, preserving in syrup or alcohol/sugar crystalization and curing.



Activity 3.26

■ *Writing*

1. Supply suitable sub-headings to the three paragraphs given above.
2. Write one example each for the methods given in bold type.
3. Find the meanings of the underlined words from a dictionary and write them in your writing book.

Activity 3.27

■ *Writing*

1. Write a short description on how different types of food were preserved in ancient times vegetables like, breadfruit, jak, yams, lime, ginger etc.as well as meat and fish.
2. What are the food items preserved for domestic use on small scale, and the food items preserved for export on a large scale?
3. Design a label for a home made bottle of jam.
4. Write the recipe of a traditional pickle.

■ **Reading**

The canning process

There are several stages in the canning process. First the fresh food **is prepared** by cutting out spoilt and all unwanted parts. At the second stage the parts remaining **are washed** and cut into pieces as required. Then food **is packed** into cans that **should be sealed** with lids.

These cans must be clean and resistant to heat. Next the cans are filled with the liquid in which the food will be preserved. This liquid is poured in while it is still boiling in order to drive out the air in the food. At the fifth stage any remaining air is steamed out and the lids of the cans are fitted tightly making the cans air tight. Then depending on the type of food being canned; the tightly sealed cans are sterilized by steam to ensure safe canning. After being steamed, the cans should be cooled immediately in cold, clean, water to take away any remaining bacteria. With this stage of cooling the cans, the canning process comes to an end.



Activity 3.28

■ **Writing**

Read the statements given below. They are not in the correct order according to the passage. Rewrite the stages in the correct order in your writing book.

a. Stages:

1. Cans are filled with liquid while it is still boiling.
2. Cans should be cooled immediately in cool clean water.
3. Cut out spoilt and unwanted parts of food.
4. Remaining air removed and cans tightly sealed.
5. Remaining parts of food washed and cut.
6. The food packed in cans and sealed.
7. Sealed cans are sterilized.

b. Fill in the blanks with the correct form of the verb given within brackets.

The Stages of Tea Making

1. The green leaves ----- (spread) evenly on long racks and left to dry.
2. They ----- (roll) by a special machine.
3. They ----- (leave) in a room to ferment which changes the colour and gives a flavour.
4. Leaves ----- (pass) through hot air machines which take away all their moisture.
5. They ----- (shift) into different grades according to the size of the leaf
6. The finished tea ----- finally ----- (pack) in chests and sent to Colombo.
7. They ----- (export) to other countries.

Now write a paragraph using the above sentences in your own words.

You may begin

Let's see how tea is made in Sri Lanka. Tea is grown in the hill country. The tender tea leaves are plucked by hand. These leaves are taken to the tea factory. The green leaves are first spread

Activity 3.39

■ Writing

Copy the following passage onto your book and complete the blanks with some of these words that are related to food and drinks. Do not use any word or phrase more than once. You can refer to a dictionary or ask your teacher to find the meanings of any difficult terms.

(vegetarian/ eat out/ cook/ vegan / recipes/ main course/ cookery books/ fast food/ ingredients/ restaurants/ dessert/meat)

If you're a 1) -----, you avoid eating 2) ----- and fish. If you are a 3) ----- you do not eat any animal product at all. Although many 4) ----- now offer vegetarian menus, cooking your own food is the easiest way of eating what you like. A three- course meal begins with the starter followed by the 5) ----- and finally the 6) ----- . You may decide to serve just one really interesting dish. Most 7) ----- in 8) ----- are not difficult if you make sure you have all the right 9) ----- . When it's ready, you can serve the friends. But if you are tired or too busy to 10) ----- you may decide you'd rather 11) ----- or get a 12) ----- to eat at home.

Activity 3.30

■ *Reading / Writing*

Read the circular given and write the answers to the following questions in your book.

Circular 2007/ 01

Supplying Refreshments for Educational Programmes

To:

Additional Secretaries - Ministry of Education,
Directors - Ministry of Education,
Commissioner General of Educational Publications
Commissioner General of Examinations
Director General - National Institute of Education,
Provincial Education Directors,
Zonal Education Directors,

In addition to the circular number 2007/02 about maintaining school canteens issued on 2007.01.10, necessary steps should be taken to include the following.

It is necessary to stop selling the food items, that have been advised as not suitable for school canteens. These should not be sold in other educational institutions either.

Fizzy drinks, instant food with high content of oil/sugar/ salt and adhesive toffees were mentioned in the previous circular.

Please take necessary steps not to supply the above mentioned food items at in-service sessions, awareness programmes and other programmes organised by all the educational institutions.

A

1. Who has issued the circular ?
2. According to the circular to whom is it issued ?
3. What food items are specified not to be sold or used in all the educational institutions?
4. What are the occasions that these educational institutions need to serve food?

B

1. Why, do you think, the Ministry of Education has issued a circular on food?
2. Suggest some food items that could be used on such occasions without violating the circular.
3. Give reasons why you;
 - a) should not use the above mentioned food items.
 - b) should use the food items suggested.

Enrichment

Read and enjoy this poem

Verbal and Physical Wounds

Once there was a hot temper'd lad
Whose words were wick'd, abusive and bad
Sometimes he turn'd violent and became mad
Dad then gave some nails with a wooden pad

“Drive a nail when you are in anger
On to this pad, using this hammer”

Thirty - something he drove on the first day
Only two and twenty on the following day
He found it easier to keep anger at bay,
Than keep on drivin' nails day after day

One fine day no nails were driven on the pad,
Boy was then summon'd by his sensible dad

‘Look, my boy, at the pockmark'd pad
The surface will never be smooth, as it had
A verbal wound will never be healed
Even if one offers apology after apology
The scar will remain for ever
Like pockmarks on the pad.’”



S.G.Ratnayake.

Poetry corner, Daily News
- Friday 16th July 2004

Activity 3.31 Group work

■ *Reading / Writing*

1. Write the meaning of the following lines.

“He found it easier to keep anger at bay,
Than keep on drivin’ nails day after day”

2. What is the message that the poet has tried to convey from this poem?

3. Write the story of the poem in your own words.

