

HEALTH EDUCATION II

MODULE 1

POLLUTION FREE FOR A HEALTHY COMMUNITY



- *What this Module is all about*

There are environmental factors that affect the health of the people. Every effort must be made to reduce the deaths, illnesses, and disabilities caused by diseases spread by water, foods, vectors, and poor personal and environmental health.

This Module will be one of those efforts that will explain to you the importance of having health examination, also the importance of solving environmental problems and the proper ways of garbage storage, disposal, and recycling.



**What you are expected to learn from this Module*

After reading this Module you shall have:

1. Explained the importance of:
 - a. Health Examination
 - b. Solving environmental problems for a healthy community
2. Practiced the proper ways of garbage:
 - a. storage
 - b. disposal
 - c. recycling



How to learn from this Module

You are encouraged to enjoy spending time in learning from this Module but before you proceed, remember to observe the following reminders:

1. Answer the pre-test before going over the materials. This is to find out what you already know.
2. Be honest in answering and checking your activity.
3. Follow closely the instructions in every activity.
4. Review the lessons that you think you failed to understand.
5. Seek assistance from your teachers if you need help.
6. Answer the post test at the end of this Module.
7. Record your answers and lessons taken in your notebook.

Are you ready? Good Luck and Happy Learning!



PRE-TEST

Test I. Multiple Choice. Write the correct answer in your notebook.

1. (a. Health Examination; b. Medical Check-up; c. Physical Check-up) will help us determine our health problems.
2. Improper disposal of waste can cause (a. cholera; b. poisoning; c. stomach ache)
3. Solid and semi-solid waste materials (a. garbage; b. human excreta; c. refuse).

4. (a. Garbage; b. Refuse; c. Rubbish) are left-over vegetables, animal, fish, and other waste materials from the kitchen.
5. Waste materials such as bottles, broken glass, tin cans, waste papers are (a. garbage; b. refuse; c. rubbish).
6. Left-over from burning wood (a. ashes; b. garbage; c. night soil).
7. It is the process of making used materials that are to be disposed already into useful ones (a. burning; b. composting; c. recycling).
8. This is where waste materials are burned (a. garbage; b. incinerator; c. recycling).
9. The cheapest ways of disposing waste materials (a. burning; b. composting; c. recycling).
10. (a. Garbage grinder; b. Grinder; c. Sewer) is a new device attached to the kitchen sink that grinds leftover foods into small particles.

Compare your answers with the Key to Correction.

** LET'S LEARN !!!*



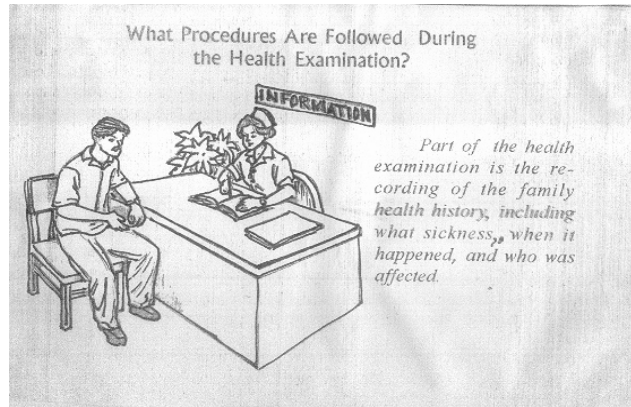
Lesson 1

IMPORTANCE OF HEALTH EXAMINATION

As you begin to take a more active and responsible role in promoting and maintaining your personal health and wellness, it is important that you know the importance of regular health examination. Choose a health-care professional who will help and work with you in your effort to achieve optimum health.

Regular health examination is needed to prevent serious health problems. Your personal health care practices, your physician, and your environment contribute in the promotion and maintenance of good health and wellness.

1. Health Examination promotes early detection of health problems.
 - the early identification and correction of health defects have very important bearing on your health and happiness in the years ahead.
2. A regular examination is important because of your contact with the nurse and physician.
 - this experience can promote a healthy experience. You will appreciate the important role of medical persons in preventing health problems.
3. The physician has the opportunity to assess your health. The physician tells whether or not you are normal and healthy, knowing from the physician that you are in the best of health is very reassuring, also, the physician gives you advice on how to improve your health.



Activity 1 “SPEAK FOR YOUR HEALTH”

Direction:

1. Interview 2 of your friends to answer the following questions:
 - a. Do you think it's important to have our regular Health Examination? Why?
 - b. Can you relate your experiences during your health examination?
2. Make a plan of action based on the results of your own health examination.



Lesson 2

IMPORTANCE OF SOLVING ENVIRONMENTAL PROBLEMS FOR A HEALTHY COMMUNITY

Do you know that the human body has built-in system to fight pollution but when the exposure is too much the person is likely to get sick? This is the reason why we have to help solve environmental problems so that we will be able to enjoy living in a healthy community.

Effects of Problems on Environmental Health and Sanitation

1. High incidence of worm infestation and intestinal diseases among the people in the community.
2. Spread of communicable diseases in urban/rural areas due to improper disposal and inefficient collection of garbage.
3. Inadequate potable water supply facilities pose health risk among community members. Water borne diseases affect the people. Personal health care, cleanliness/sanitation at home and in the community are neglected when there is inadequate water supply.

At home your family can start solving some problems that contribute to community health problems by doing the following:

- clean your home surroundings to prevent breeding places for insects like mosquitoes and others;
- do not litter to prevent pile of garbage around and to keep the community clean;
- plant trees and other plants to help in pollution control;
- join in community clean-up and beautification drive.

There are other activities that will help you and other members make a healthy community. Your cooperation and support will make a difference.



Activity 2 “HEALTH ALPHABET”

In your notebook, write statements about your community using the words below. Use the letters in Healthy Community as starters. The first and the last statements have been done for you.

community	breeding places	garbage	diseases
pollution	worm infestation	environment	health
sanitation	improper disposal	cleanliness	litter
cooperation	health problems	beautification	clean-up

Healthy community can make a healthy citizenry.

H
E
A
L
T
H
Y

C
O
M
M
U
N
I
T

You as a member of the community can do a lot to improve the quality of environment and have a healthy community.



Lesson 3

PROPER WASTE MANAGEMENT

Proper waste management should be practiced at home, in school, in the community and in all other places. Proper waste management includes the following:

- proper storage and collection
- proper garbage disposal
- recycling

Proper Storage

Proper waste storage is a responsibility of every individual. There can be an efficient collection and effective disposal system if everybody will cooperate in storing their garbage properly. Everybody must be aware of the hazards and nuisance associated with unsanitary practice of waste storage.

Segregation of waste is very important. Biodegradable and non-biodegradable materials must be placed in separate container. Those that can be recycled can be placed in separate receptacle. This refuse can still be reused for more profitable ventures.

Storage container of refuse should be covered. It should be washed to avoid odors and the accumulation of fly-supporting materials.

Stored garbage must be ready for collection at scheduled time in places where there is collection service. Do not just leave the garbage in front of your house when no garbage collectors or pick up services are available.

Proper Waste Disposal

Improper disposal of waste has been responsible for the outbreak of diseases and epidemics such as: cholera, typhoid, viral infections, hepatitis, and others. These diseases have even resulted to a large number of deaths. Unhygienic waste disposal also brings about unsightly conditions and annoying odors that are nuisance to any community.

Many municipalities have waste-sanitation program. They have identified a single dumping site for disposing waste.

Solid waste can be disposed through different methods like dumping, composting, grinding, feeding to animals, incineration, and recycling.

Dumping of waste anywhere will result to serious nuisance and hazards. It will become breeding place for flies, mosquitoes, rats, and other insects.

REFUSE – is a general term applied to solid and semi-solid waste materials other than human excreta.

Types of Wastes

1. Garbage - left-over vegetables, animal, fish, materials from the kitchen or establishment that has a tendency to decay, giving off foul odor and become good breeding place for flies and rodents.
2. Rubbish - waste materials such as bottles, broken glass, tin cans, waste papers, discarded porcelain wares, pieces of metal scrap, and wrapping materials. These are health hazards.
3. Dead Animals – killed on the street or died from diseases.
4. Stable Manure – animal waste from stables.
5. Street Sweepings – dust, leaves, cigarette butts, candy wrappers, plastic cups, plastic bags, foil wrappers, waste paper, animal manure, and other materials that are swept from streets and plazas.
6. Night Soil - human waste normally thrown into sidewalks, railroad, and streets.
7. Ashes/Debris – left over dust from burning wood coal

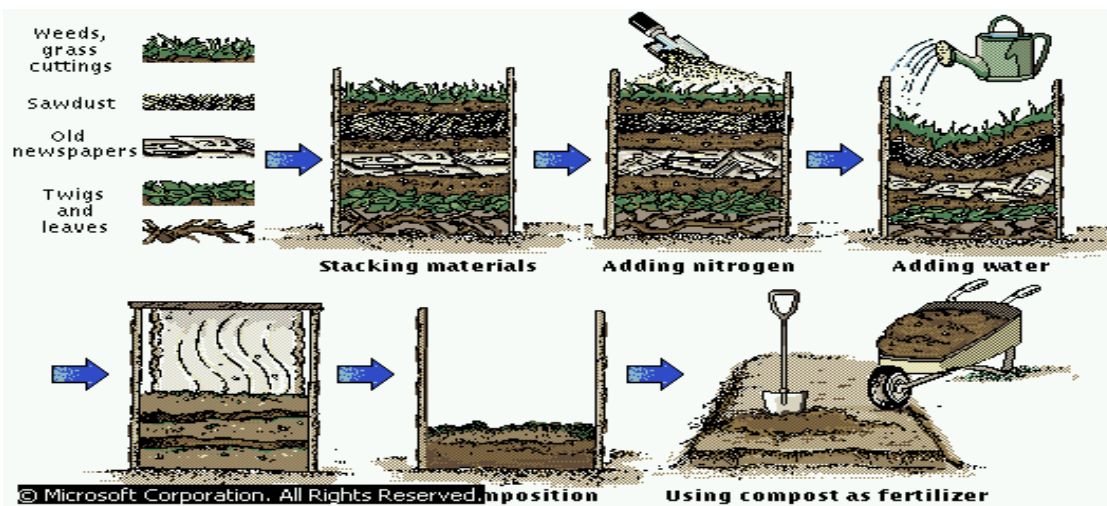
There are three main factors that contribute to the problem of waste management,

1. population explosion
2. poverty
3. ignorance

Refuse Disposal Methods

- **burial** - refuse is deposited in pits deep enough to allow at least 2 feet soil cover to prevent dogs, rats, and other animals from excavating the buried waste.

- **burning** - this is usually done by burning the waste materials on the ground or incinerators. In crowded areas this method may not be advisable because it will create smoke which pollute the air and even cause fire.
- **feeding to animals** - left-over food and certain kind of garbage materials that can still be made use of by feeding them to pigs, chicken, and other poultry and live tocks.
- **grinding and disposal to sewer** - commercially available device known as “garbage grinders” are attached to the kitchen sink. Left-over food are ground into small particles and washed down to the waste pipes and finally to the septic tank or public sewerage system. This method is very sanitary.
- **composting** - depositing the garbage, leaves or rubbish and animal manure into a pit and covered with soil to about two to three feet. The composted material will serve as a good fertilizer and soil conditioner.



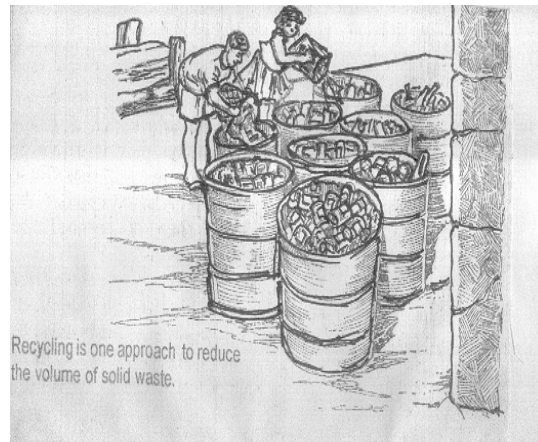
- **dumping** - most frequently used, being one of the cheapest when appropriate dumping places are available. The problem with the method is lack of adequate soil cover to enable rats and flies from feeding on the wastes. They are also eyesores to the community.
- **reduction and salvage** - used in some places such as large slaughterhouses and meat packaging plants where there are plenty of animal fat in the leftover materials. By mechanical means, oil, grease and fat are removed. The extracted oil is then used for commercial purposes.



- **recycling** - a process of making used materials that are to be disposed into useful ones, such as candy wrappers into flowers, out of discarded porcelain wares into lampshades, garbage into fertilizer, animal feeds, etc.

Research studies have shown that solid waste problem is a major contributing factor to serious diseases affecting many households. Furthermore, increased government expense on garbage disposal will not solve the problem and the miserable conditions of the scavengers will not be improved. People should be taught that the key to environmental protection and sanitation is a systematic garbage management on a self-reliant basis. Integrated household's recycling of garbage is recommended to promote health and sanitation in the communities.

Recycling aims to maintain ecological balance communities, free from insects and pests through the conversion of waste into useful materials. Its objectives are to accept the value of containing refuse and other wastes; avoid pollution of air, water and land; involve family and community members in continuous total recycling process through a serious motivational and environmental education; and re-utilize the pre-sorted wastes.



Benefits From Recycling

1. Streets will become cleaner, thus preventing the spread of diseases such as TB, diarrhea, and polio.
2. People will be more disciplined in disposing off their garbage.
3. Scavengers or better called Ecology-Aides who will get involved in the project of recycling will be given the chance to earn a clean and decent living.
4. The community can earn money to fund recycling projects.
5. Food production can be increased through the use of fertilizers and more systematic collection of recycled returnables such as bottles and cans.
6. Organic composed fertilizers would greatly reduce the importation of inorganic-oil based fertilizers.
7. Garbage pollution and litter in the school, home, and community will be eliminated.
8. Energy conservation can be achieved when the barangay/community utilizes additional methane gas from bio-gas.



Activity 3 “What Can I Do To Help?”

1. Collect candy wrappers and create a mosaic of any design or figure you want or make them into flowers arranged in a vase.



* *LET'S SUMMARIZE IT !!!*

- Health examination/ check-up should be done regularly to detect and solve health problems at an early stage.
- Solving environmental health problems need the support and cooperation of everybody in the community.
- Community health problems like improper waste management greatly affect environmental health and sanitation of the community and personal health of its members.
- High incidence of parasitism and intestinal diseases are common in areas with unsanitary environment.
- Rapid spread of communicable diseases take place when there is improper waste disposal and inefficient garbage collection.
- Clean-up drive, beautification, tree planting are some of the activities that will help achieve a healthy community
- Proper waste management includes proper storage, proper collection, proper disposal, and recycling. These must be practiced to promote and maintain a healthy community.

* *Let's See What You Have Learned*



POST TEST

- I. Fill in the blanks. Write the correct answers in your answer notebook.
1. Proper _____ of waste materials is needed so that rats, flies, and insects will not be attracted to it.
 2. _____ can be used for feeding animals like pigs, chicken, and other poultry livestock.
 3. Compost materials will serve as good _____.
 4. _____ is a general term applied to solid and semi-solid waste materials.
 5. _____ is human waste normally thrown into sidewalks and streets in urban areas.
 6. _____ has the built-in system to fight pollution.
 7. _____ is animal manure from stables.
 8. _____ is a good breeding place for flies and rodents.
 9. _____ refuse is deposited in pits 2 feet deep, covered with soil to avoid dogs, rats and other animals from excavating solid waste.
 10. _____ is the production of refuse into something usable.

II. Rearrange the following scrambled letters. Write the answers in your notebook.

A. Types of waste materials

11. B A R G A G E

12. S I R B E D

13. S E T T E R P E W E S I N G S

B. Methods of refuse disposal

14. L Y C C E R I N G

15. C O S T M O P I N G

16. U R I L A B

17. G R I N N U B

III. In the box, choose the Three Factors contributing to the Waste Disposal Problem.

In any order write your answers for numbers 18-20.

Poverty

Wealth

Ignorance

Population control

Population explosion

Education



* *KEY TO CORRECTION*

Pre-Test

Test I. Multiple Choice. Write the correct answer.

1. Health Examination

2. Recycling

3. Incinerator

4. Dumping

5. Garbage grinder

6. Ashes

7. Cholera

8. Refuse

9. Garbage

10. Rubbish

Activity 1 "Speak For Your Health"

Note: Answers may vary based on your interviewee and your opinion.

Activity 2 "Health Alphabet"

Note: Answers may vary depending upon your choice/ preference.

Activity 3 “What Can I Do To Help?”

Evaluate your output. Do you appreciate what you have done?

Post Test

Test I. Fill in the blanks. Write the correct answer.

- | | |
|-------------------|------------------|
| 1. Storage | 6. human body |
| 2. left-over food | 7. stable manure |
| 3. fertilizer | 8. garbage |
| 4. refuse | 9. burial |
| 5. night soil | 10. recycling |

II. Scrambled Letters

A.

- 11. GARBAGE
- 12. DEBRIS
- 13. STREET SWEEPINGS

B

- 14. RECYCLING
- 15. COMPOSTING
- 16. BURIAL
- 17. BURNING

C (in any order)

- 18. } Population explosion
- 19. } Poverty
- 20. } Ignorance



What is your score? If you got 10 correct answers in the post test,

Congratulations!

If your score is 6 or below, you need to go over this Module again.

