



WATER, SANITATION & HYGIENE

ENTREPRENEUR'S GUIDE

FIRST EDITION

## PREFACE

According to different health managers and scientist, hygiene is defined as a science concerned with prevention and maintenance of health. Indeed, this definition meets the impact of safe hygiene practices. Various researches and reports from governments and its stakeholder show that the infections related to hygiene are among the top 5 leading causes of deaths, especially among the children under 5.

If the people, especially those who handle some foods including: mothers who are in charge of preparing and serve the family members and different cookers in families, restaurants and hotels had healthy habits, the spread of diseases would be very limited and related consequences as well.

One of the strategies able to mitigate the spread of contamination within the people and outside is to give the basic hygiene information to youth who will be responsible of their families as well as their communities. This training will empower you in terms of hygiene information so that they may be able to explain to their friends or families about all aspects of hygiene.

This handbook contains 5 major aspects including:

- Personal hygiene including hand washing
- Food hygiene
- Water hygiene
- Environmental hygiene

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# UNIT 1: DISEASES PREVENTION THROUGH SAFE HYGIENE

## HAND WASHING

Good hand washing practices is one of the measure used to reduce the incidence of diseases notable: Pneumonia, trachoma, scabies, skin and eye infection, diarrhoea diseases: Worms, cholera, dysentery The promotion of hand-washing with soap is also a key strategy for controlling the spread of Avian Influenza (bird flu).

The most important times that hands should be washed with soap and water are:

- After defecating.
- After cleaning a child who has defecated.
- Before and after eating or handling food.
- After contact with contaminated surface (rubbish, cleaning clothes food contaminated)
- After handling pets and domestic animals
- After wiping or blowing the nose or sneezing into the hands
- After handling soil tissues (self or others)
- After contact with blood or organic fluids
- Before and after dressing wounds
- Before and after giving care to a person

## PERSONAL HYGIENE

### INTRODUCTION

What is personal hygiene? A personal hygiene is a set of healthy hygiene practices that a person as individual has to perform so that she/he can be free from diseases .It is an approach used by person to protect her/him from illness and infection as well. A personal hygiene involves properly caring for your body by keeping it clean and healthy while allowing you to look and feel your best.

### BASIC PERSONAL HYGIENE HABITS

If you want to minimize your risk of infection and also enhance your overall health, follow these

- Bathe regularly. Wash your body and your hair often. “It means to say that you should clean your body and shampoo your hair at regular intervals that work for you.” The skin needs to come off. Otherwise, it will cake up and can cause illnesses.”
- Trim your nails. Keeping your finger and toenails trimmed and in good shape will prevent problems such as hangnails and infected nail beds. Feet that are clean and dry are less likely to contract athlete’s foot,
- Brush and floss. Ideally, you should brush your teeth after every meal. At the very least, brush your teeth twice a day and floss daily. Brushing minimizes the accumulation of bacteria in your mouth, which can cause tooth decay and gum disease. The bacteria that build up and causes gum disease can go straight to the heart and cause very serious valve problem. To maintain a healthy smile, visit the dentist at six-month intervals for checkups and cleanings

- Wash your hands. Washing your hands before preparing or eating food, after going to the bathroom, after coughing or sneezing, and after handling garbage, goes a long way toward preventing the spread of bacteria and viruses. Keep a hygiene product, like an alcohol-based sanitizing gel, handy for when soap and water isn't available.
- Sleep tight. Get plenty of rest — 8 to 10 hours a night — so that you are refreshed and are ready to take on the day every morning. Lack of sleep can leave you feeling run down and can compromise your body's natural defenses, your immune system.

## UNIT 2: FOOD HYGIENE

The hygiene is necessary in every aspect for human being. The contamination from food enters directly in the body and the microbes attack the immune system after some hours or minutes. The food is easily contaminated when it is not covered and conserved in clean material or manipulated by someone with contaminated hands without washing. You will be trained on how to protect the food from any contamination

### HOW TO KEEP FOOD FROM CONTAMINATION

#### KEEP YOUR HANDS CLEAN

- Always wash your hands with soap after meals and after you go to toilet. Dry up your hands with a clean cloth otherwise dry them in the air.
- Wash your hands thoroughly before handling food to prevent contamination
- Wash your hands after handling raw food

Keep your food clean and free from contamination by respect the following counsels

- Before cooking or eating, make sure you wash your vegetables and fruits thoroughly. This will remove dirt and other contaminants.
- Wash raw leafy vegetables them before eating
- Wash coated fruits skin like apples, grapes and etc. with water before eating them raw
- Use separate spoons or chopsticks while having meals to prevent contamination
- Do not dip the used spoons, forks or chopsticks into the food while the food is still cooking. They might not be fully cooked yet.
- Prevent contaminating food with pathogens spreading from people and pets.
- Separate raw and cooked food to prevent contamination.
- Store food at the appropriate temperature.
- Use safe water and raw materials.

#### KEEP YOUR KITCHEN CLEAN

- Kitchen utensils such as cutting boards, spatulas, sinks, countertops should be kept clean. Dry them to prevent the accumulation of dirt and harboring of bacteria.
- Keep kitchen garbage into bags and dispose them regularly
- Do not accumulate kitchen waste in your kitchen or backyard as it attracts insects, ants, flies, cockroaches and rats. It can also be a source of contamination
- Dry out aprons, tablecloths and kitchen gloves under the sun to avoid mold and bacteria.

## UNIT 3: WATER HYGIENE

Water is one of our major health determiners. No human and animal being can live without water. Even the plants (grasses and trees) they live because of water run water or water from fountain. The physiologist says that the 2/3 of our body is water. It is main component of organism/body because it intervenes in body protection but it depends upon we protect from contamination the water helps our organism to eliminate food waste products (stools) and other organic waste. Using and drinking safe water help us to remain healthy.

Water is a good and indispensable for our body and all of living creatures. But the man contemns it until it becomes the vehicle for the pathogenic microbe. The health managers gave a proposal of what safe hygiene practices to perform for protecting the water for drinking and using for other needs/issues.

### ADVANTAGES FROM WATER

- See information card on EH
- It forms the base of body fluids
- It regulates the body temperature
- It prevent from constipation

### DISADVANTAGES FROM POLLUTED WATER

- All water born diseases are can be ingested if they drink it without cleaning it;
- Some diseases are among others: Dysentery, amoeba, worms, cholera, polio, and bilharzias...

### SAFE DRINKING WATER

- Use clean materials
- Treatment: Boiling, using disinfect (Sur Eau, pure), filtration, solar disinfection
- Protect the sources/fountains
- Clean the rank

### 5 THINGS TO DO TO ENSURE SAFE DRINKING WATER AT SCHOOL

1. Clean drinking water fountains daily using procedures found in this guide.
2. Clean debris out of all outlet screens or aerators on a regular basis using the procedures found in this guide.
3. Test the facility's drinking water for lead. If lead is present, follow the actions for addressing lead contamination outlined in this guide.
4. Evaluate your facility for the presence of cross-connections and address any issues related to cross-connections by following the recommendations found in this guide.
5. If elevated lead levels are found, regularly flush all water outlets used for drinking or food preparation and install point-of-use devices, to provide additional treatment of drinking water at the outlet. Bacteria are present throughout our environment.

N.B. Some bacteria may survive and enter the distribution system (the building's pipes and plumbing). They can grow within plumbing system

## UNIT 4: ENVIRONMENT HYGIENE

Environmental health refers to the aspects of human health determiners related to physical, biological, social and psychological factor in the environment. To have a good health requires ensuring the hygiene in your environment: mental, body, toilet, good waste management, clean water, clean houses, etc.

### ADVANTAGES FROM SAFE DRINK WATER

- Drinking
- Cleaning the body (human): Washing the body, washing the dresses,
- Clean the houses
- Cooking
- Clean the utensils
- Human and animal physiology
- Intervene in digestion of human being and animals
- Clean utensils used to the table and function of body
- Protection of body (clean the waste)
- Building
- Treatment in case of dehydration or other diseases

### WATER RELATE DISEASES

Water, sanitation and hygiene have important impacts on both health and disease. Water-related diseases include:

- Those due to micro-organisms and chemicals in water people drink;
- Worms, cholera, dysentery, kidney diseases, or heart diseases due to some mineral such as cooper and lead
- Diseases like schistosomiasis which have part of their lifecycle in water;
- Diseases like malaria with water-related vectors;
- Poliomyelitis

Each day, more than 6,000 children under age 5 die from diseases spread by unsafe water or lack of basic sanitation and hygiene. More than half of these deaths are preventable through basic interventions, including the provision of clean water, basic sanitation and hygiene education

### SANITATION

Sanitation refers to the provision of facilities and services for the safe disposal of human urine and feces. It refers also the system of maintenance of hygiene conditions waste management and garbage collection

When we say sanitation in EH we mean the system of managing the domestic waste and storm water drainage.

### DOMESTIC HYGIENE

Domestic hygiene is related to the cleanliness at home: toilet, waste management, wastewater drainage, utensils for table and kitchen and other areas in house, outside and around your house.