#### Lesson Plan: Food Hygiene



60 minutes total

#### **Lesson Description**



This lesson will focus on how food is contaminated. Participants will also explore ways to prevent people from getting sick from eating contaminated food.

#### **Learning Outcomes**



At the end of this session participants will be able to:

- 1. Describe the importance of food hygiene
- 2. Explain how food can become contaminated
- 3. List practices to reduce disease transmission through food
- 4. Discuss indicators of food hygiene in a household

#### **Materials**



- Flip chart paper
- Markers
- 5 Keys to Safer Food titles
- □ Sticky notes

#### **Preparation**



- Optional: Write the learning outcomes on flip chart paper
- Read the WHO resource document on food hygiene (http://www.who.int/foodsafety/publications/5keysmanual/en/)
- Print and cut the '5 Keys to Safe Food' titles

Introduction 2 minutes



- 1. Ask participants: "Have you ever become sick after eating at a restaurant?"
- 2. Ask participants: "Did you wash your hands before eating?" and "Did you drink dirty water?"
- 3. Explain to participants that even though you may have done everything to not get sick by washing your hands and drinking clean water, people can still get sick from eating food that is contaminated.
- 4. Present the lesson description or learning outcomes.



#### Importance of Food Hygiene

15 minutes



- 1. Ask the participants: "What is meant by food hygiene?"
  - The WHO definition: Food hygiene are the conditions and measures necessary to ensure the safety of food from the moment you are cooking it to when you eat it. Food can become contaminated at any point during slaughtering or harvesting, processing, storage, distribution, transportation and preparation.
- 2. Explain to participants that food is filled with microorganisms. Microorganisms are very small living things that live in the environment, including food but not all of them are bad! Most of them are actually very good for you.
- 3. Explain to participants that we can organize microorganisms into 3 categories: Good, Bad, and Dangerous. Write these 3 titles on the same flip chart paper in 3 columns.
- 4. Explain that good microorganisms can be used to make food (like cheese, yoghurt, beer, and wine), to make medicine (for example, penicillin), and they are necessary for your stomach to be able to digest food effectively. Write these examples under the 'Good' column.
- 5. Explain to participants that some microorganisms are called spoilage microorganisms. These do not usually make people sick, but they cause our food to smell bad, taste horrible, and look disgusting.
- Explain that some of these microorganisms are initially safe, but over time they can become unsafe as the microorganisms reproduce. Some of these microorganisms can eventually multiply by eating the nutrients in the food and make the food dangerous to eat.
- 7. Explain to participants that 'Dangerous' microorganisms are unsafe and are the ones that can make people sick and could even lead to death. We can also call these 'pathogens'. The pathogens in food can be different than the pathogens found in water.
- 8. Ask participants if they know any dangerous microorganisms or pathogens which can be found in food. *Some answers include Salmonella, E. coli, Giardia, and Hepatitis A.* Write these examples under the column 'Dangerous'.

#### **Contamination and Reproduction**

10 minutes



- 2 1. Explain to participants that all microorganisms need something to move them around; they don't have legs like animals and human do. Microorganisms move around by attaching themselves to things. Microorganisms need transportation, like we need a car or motorbike to get from one place to another.
  - 2. Explain to participants that the movement of microorganisms by attaching themselves to things is called 'contamination'. We want to avoid 'contamination' in food hygiene.
  - 3. On a new flip chart paper, make 2 columns and write the first title 'Contamination'.
  - 4. Ask participants: "What are some common things that can help move these microorganisms around? Think back to transmission routes activity."



- Hands, water, animals, feces, flies, surfaces used for food preparation, kitchen utensils, glasses, and other food.
- 5. Write their answers under the column 'Contamination.'
- 6. Explain to participants that microorganisms can reproduce very quickly, just like bacteria can reproduce in water very quickly. A few dangerous microorganisms may not make you sick, but many dangerous microorganisms can. The more dangerous microorganisms there are in the food, the more likely someone can get sick by eating it.
- 7. Write 2<sup>nd</sup> title called 'Reproduction'.
- 8. Explain to participants that microorganisms need the same things as humans do to survive and reproduce: food, water, time, and a good temperature. Write these 4 things in the column 'Reproduction'.



9. Ask participants: "After learning more about microorganisms, what are the 2 main goals of food hygiene?" Refer to the 2 columns on the board. 1. To prevent the contamination (or transportation of dangerous microorganisms) of food, and 2. Kill or prevent dangerous microorganisms from reproducing.

#### **Food Hygiene Practices**

20 minutes



- 1. Tell the participants that they are going to work as a group to explore how to prevent food from being contaminated and how to kill or prevent microorganisms from reproducing to keep our food safe to eat.
  - 2. Divide the participants into groups of 4-5 people. Give each group sticky-notes.
  - Ask the participants to work as a group to write down individual activities that can be
    done in a household to improve food hygiene on individual sticky notes. These
    activities should focus on 2 things: preventing contamination and kill/preventing
    reproduction
  - 4. Ask the participants to stick their sticky notes on the wall in the front of the room.
  - 5. As the participants stick them on the wall, group them into the WHO 5 Keys to Safer Food.



#### Keep Clean

- Wash your hands before handling food and frequently during food preparation
- ii. Wash your hands after going to the toilet
- iii. Wash and sanitize all surfaces and equipment used for food preparation
- iv. Protect kitchen areas and food from insects, pests, and other animals

#### Separate raw and cooked

- i. Separate raw meat, poultry, and seafood from other foods
- ii. Use separate equipment and utensils, such as knives and cutting boards, for handling raw foods



iii. Store food in containers to avoid contact between raw and prepared foods

#### Cook thoroughly

- i. Cook food thoroughly, especially meat, poultry, eggs, and seafood
- ii. Bring food like soups and stews to boil to make sure they have reached 70 degrees Celsius. For meat and poultry, make sure that juices are clear, not pink. Ideally, use a thermometer.
- iii. Reheat cooked food thoroughly

#### Keep food at safe temperature

- i. Do not leave cooked food at room temperature for more than 2 hours
- ii. Refrigerate promptly all cooked food and food that can go bad (preferably below 5 degrees Celsius)
- iii. Keep cooked food really hot prior to serving
- iv. Do not store food too long even in the refrigerator
- v. Do not thaw frozen food at room temperature

#### Use safe water and raw materials

- i. Use safe water or treat it to make it safe
- ii. Select fresh and wholesome foods
- iii. Choose foods processed for safety, such as pasteurized milk
- iv. Wash fruits and vegetables, especially if eaten raw
- 6. As you explain the 5 keys, stick the different titles on the side of the groups. Add a few examples if they have not been mentioned.

#### Indicators of Food Hygiene in a Household

15 minutes



- Explain to participants that part of their role as Community WASH Promoters is to motivate household members to adopt good food hygiene practices. It can sometimes be difficult to determine if the household members are adopting good hygiene practices already.
- Explain to participants that they will now discuss ways that a Community WASH
  Promoter can determine if a household member is using good food hygiene
  practices.
- 3. Ask participants: "What are some ways that we can see if a household member is using good food hygiene practices?" Write their answers on flip chart paper at the front under the title 'Ways to observe good food hygiene practices':
  - Food covers for flies are present
  - Animals cannot easily access the cooking area
  - Soap to clean dishes and cooking surfaces is present
  - Household is using safe water



- Handwashing station is present
- Refrigerator is present
- 4. Ask participants to write these answers down on a piece of paper.

Review 5 minutes



- 1. Ask participants to reflect upon their own behaviours for food hygiene.
- 2. Ask participants to write down 2 things that they will change for their own food hygiene practices at home.

#### **Reflections on Lesson**



### 1. Keep Clean

# 2. Separate raw and cooked

## 3. Cook thoroughly

# 4. Keep food at safe temperature

## 5. Use safe water and raw materials

