

Development of the Session

Hand Hygiene

STAGE 1: The Importance of Hand Washing

As a food handler, we have a legal responsibility to ensure that food does not become contaminated. Contaminated food could be harmful to health because it contains something that should not be there. Many food-borne disease outbreaks start with microbes on the hands of food workers*.

*Todd EC et al. J Food Prot.2010;73(10):1937

Q. What examples are there of something harmful in food that should not be there?

Contaminants fall into three categories:

- Physical (glass, parts of machinery)
- Chemical (cleaning, chemicals, pesticides)
- Biological (bacteria, viruses, fungi)

Contaminants get into food in one of two ways:

- Directly (touching or falling onto the food)
- Indirectly (via a vehicle such as cloths, hands, knives, chopping boards)

Biological contamination very often occurs indirectly and one of the vehicles that causes biological contamination is the **hands**.

Example:

Handling raw meat then touching a cheese sandwich moves the bacteria from the raw meat onto a food that is ready to eat.

For this reason it is very important that we wash our hands regularly to ensure that food does not become contaminated.

Learners will be responding to questions.

Possible answers identified, may have to probe more answers or explain if the required answers are not forthcoming from learners.

Examples from group might include:

- Broken glass
- Jewellery
- Hair
- Chemicals
- Bacteria

Explain and Show Cards with Pictures for Visual Support

Q. When would you need to wash your hands?

Suggested responses:

- Before starting work
- Between handling different types of foods, such as raw food and cooked food
- After visiting the toilet
- After coughing and sneezing
- After touching your face or hair
- After carrying out cleaning jobs
- After dealing with rubbish, waste or bins
- After eating, drinking and smoking

Q. What would discourage you from washing your hands regularly?

Suggested responses:

- Insufficient hand wash stations
- Dirty soap bars, harsh soap
- Empty soap dispensers
- Insufficient drying facilities
- Dry/sore hands
- Too busy!

STAGE 2: Effective Hand Washing

Let's start off by talking about the correct soap.

Q. Why is it important that we use soap at all?

- Soap has a bactericidal action. Water alone is not effective in removing harmful bacteria

Q. What is important about the type of soap we use?

- Non-perfumed
- Good quality
- Mild on the hands

Q. Why is non-perfumed soap important in a food environment?

- Perfumed soaps can taint food

Q. What is the benefit of a mild soap?

- Washing hands frequently may lead to chapped, cracked hands
- Mild soap leads to fewer skin infections due to dried out hands

Q. What is the benefit of a high quality soap?

- Low quality soaps could be less effective as they may contain more water and less active ingredient that kills bacteria

Q. Why is this important in relation to food workers?

- Blood from cuts and cracks could contaminate food
- Flaking skin could drop into food and could contaminate it
- Any of these indications could mean you are not allowed to work with food until the condition is healed

The soap we use, Tork soap, is high quality, and mild on the skin, which helps to reduce contamination through sore and infected hands.

Q. What else do you need to wash your hands?

- Clean water. Warm water is more comfortable to use than cold water

Q. How long do you wash your hands for?

- A minimum of 20 seconds, but ideally for 30 seconds
- You should wash your hands more thoroughly when handling food than at other times

Q. Which areas of the hands are easily missed?

- Under and around the nails/wrists/between the fingers

Demonstrate
Hand Washing

Explain

Explain This is
Why We Have
Tork Arm Lever
Dispensers if
Available

Demonstrate
Changing the
Soap Bottle

Q. Why are these areas particularly important?

Trainer to demonstrate hand washing technique

- These are the areas where food gets attached and bacteria can start to multiply

Learners observe hand washing demonstration

Q. How is soap made available in the workplace?

If we have bacteria on our hands; for example after visiting the toilet or after coughing into the hand, it is possible that when we touch things other than food, we can transfer the bacteria onto that item.

These items are called **food contact surfaces** and **hand contact surfaces**.

Food contact surfaces are any surface that comes into contact with food such as chopping boards, plates, work surfaces.

- Usually in soap dispensers

Q. How can we minimise touching the dispenser with our hands?

- Arm lever dispensers are operated by pressing the lever down with the fore arm which is less likely to be contaminated

Q. When is the dispenser likely to be touched excessively?

- When refilling or replacing the soap

Trainer demonstrate changing a soap bottle

Learners observe demonstration

The Tork dispensers are:

- Easy to change (5 seconds)
- Are single use bottles/pumps so no refilling required
- They have a mixture of hard and soft plastic that collapses as the bottle empties

Q. How do these aspects benefit the food handler?

- Single use, sealed system helps prevent the spread of bacteria
- As they are easy to load, there is less handling of the container, therefore less likely to contaminate
- Easy 5 second change over encourages food handlers to replace an empty bottle rather than taking short cuts and just using warm water to wash hands without soap

Research has shown that 25% of refillable dispensers tested in public washrooms are contaminated with harmful bacteria.*

*Chattman M et al. J Environ Health, 2011;73(7):26

Q. How do single use, collapsible bottles encourage food safety?

- Collapsible bottles lead to less bulk for disposal; refuse handling and hand contamination is reduced
- Single use bottles and pumps reduce the risk of bacteria from old soap building up and contaminating the hands

Q. How do collapsible bottles help the environment?

- Less wastage
- Less bulk to dispose of

Trainer to observe all learners changing a soap refill in the dispenser. Introduce a fun element by timing each learner to see who is the quickest to change the bottle up to the correct standard.

Allow the learners to practice changing a soap refill in the dispenser.

Some dispensers are designed for use with foam soap. These have more doses per litre in comparison with normal liquid soap. This helps to reduce costs.

- Less likelihood of soap running out which could compromise hygiene standards.

Q. What is the hygiene benefit of having more doses per bottle?

Although high quality products such as foam soap may be more expensive to purchase, it is important that a commercial operation considers all the associated costs over a period of time. This is called '**cost-in-use**'.

Cost-in-Use

Cost-in-use includes all costs associated with using a product:

- The cost of the unit (bottles/cases)
- The amount required for effective use
- The amount of time using the product
- The servicing cost - refilling the dispenser
- Wastage

Q. Any questions?

STAGE 3: Effective Hand Drying

Once we have washed our hands, we need to dry them.

Q. Why is it important to thoroughly dry our hands after washing them?

- Damp hands transmit up to 500 times the number of germs as dry hands*
- Effective hand drying removes up to 99% of harmful bacteria and viruses*

*Patrick D et al. Epedermiol. Infect. 1997; 119(3):319

- Careful hand drying is critical in helping to prevent the transfer of bacteria to food and surfaces



Q. What are some of the ways in which we can dry our hands?

- Textile towels
- Paper towels
- Air hand dryers

Q. What is the safest way to dry the hands in a food environment?

Grubby textile towels are vehicles for bacterial contamination.

- Single use paper
- Drying with a second and third paper towel removes additional bacteria especially from the finger-tips*

*Yamamoto Y et al. Infect. Control Hosp. Epidemiol. 05;26(3):316-320

Q. In what way do we need to consider the quality of paper towels for drying hands?

- Good, fast absorption to remove moisture where bacteria multiply
- Strong, does not break when wet

Let's return to 'cost-in-use' now for paper towel usage.

Q. What feature of a paper towel would contribute to an efficient 'cost-in-use'?

- Single sheet presentation from a dispenser to avoid over-use

Q. Previously we mentioned physical contamination - how could a thin, flimsy towel contribute to physical contamination of food?

- Pieces from low quality towels could tear off and fall into the food
- Thin towels stick to the hands when wet and then we could transfer the soggy paper into the food

Q. What colour paper towel would help to identify physical contamination?

- Blue

Explain

Paper towels are often available in both white and blue. Blue is recommended in food preparation and service. Blue stands out in food as naturally blue foods are rare.



Q. When accessing your paper towel, what is important to remember?

- Only take one at a time
- Do not touch the dispenser or towels you are not using

Q. Why is this so important?

- To avoid contaminating the other towels and the dispenser with water and possibly bacteria
- The dispenser is a hand contact surface

Trainer demonstrates

Learners observe demonstration and relate to questions

Let's now have a look at our towels and dispenser

Q. How do Tork towels and dispenser systems aid meeting food safety standards?

- Easy dispensing of the roll towel and ZigZag towels so only one you need comes out, and not numbers of unnecessary towels which may sit on the surfaces, fall on the floor or attempts made to push the contaminated towels back into the dispenser

Q. What could be a common reason for food handlers to dry their hands on a dirty cloth or apron?

- Paper towel dispenser is empty

Q. Look at this dispenser (if applicable). How can you easily see that the towels are running out without opening it up?

- Tork dispensers have a semi-transparent section which enables the level to be checked

Q. What would you do if you noticed the towels were running low?

- Inform a supervisor or fill it up myself

Q. Once you have dried your hands, what would you do with the paper towel?

- Put it in the refuse
- It is now contaminated so it would not go into recycling

Explain

All hand drying systems have an impact on the environment, but thorough drying of hands in a food environment is essential and the use of paper towels by food workers is encouraged.

Tork paper towels and soap are produced with the environment in mind. Many products have eco-label accreditations which means their impact on the environment has been minimised.

Activity (5 minutes)

Trainer allows all learners to wash and dry their hands as taught. Trainer observes and corrects as necessary, then congratulates learners.

Learners practise washing and drying hands correctly.

Q. Any questions?