1. Kitchen Hazards (slides 3-4)

Kitchens can be dangerous places – they’re filled with appliances and utensils which may use electricity, produce very high heats, be very sharp or heavy and capable of causing injuries.

Would anyone like to share a personal experience they have had with electricity, heat or another kitchen hazard?

Many of us would have had some experiences with kitchen hazards, and we have grown up with these things all our lives and are taught from a young age how to operate them safely. People who are coming from places where these things weren’t the norm haven’t had the opportunity to gather this knowledge through experience and now they need someone to tell them and help them learn these things.

2. Food poisoning (slide 5)

Food poisoning is quite common. Many of you will have had some experience and probably remember it quite vividly, so a discussion with your neighbour would be worthwhile here.

Food poisoning refers to an illness resulting from consumption of food which was contaminated with bacteria, viruses, parasites or chemicals. Most food poisoning is caused by bacteria. Typical symptoms are nausea, stomach pains, vomiting and diarrhoea, fever and headaches. These can vary in severity and the timing of their onset depends on the type of bacterium. For example, it can take 48 hours for the symptoms of Salmonella poisoning to appear, but Listeria-caused food poisoning can appear at any time up to 90 days. Certain groups of people are more vulnerable to food poisoning than others – these include elderly, pregnant women or young children. Many of the refugees arriving include pregnant women or young children, so they are actually a high-risk population. Also, many refugees will be arriving somewhat malnourished and with weakened immune systems. This decreases their ability to fight an infection and can make a case of food poisoning more severe.

This makes following simple food safety steps to reduce the risk of food poisoning all the more important. Introducing these steps to refugees early in their integration will help them to adopt them as habit. We’ll start with some background information about how bacteria grow and spoil food, and then go through the food safety messages and actions that can help to keep our food safe.

3. Key factors involved. (Slide 6)

Four factors are implicated in the growth of food-poisoning causing bacteria. These are the presence of food, moisture, and the temperature and time for which that food is stored.
3.a) High-risk foods (slide 7-8)
Some foods are more prone to containing bacteria than others. These are raw meats, including fish and poultry, as well as eggs, dairy, and fruit and vegetables once they have been cut. This is because bacteria like high protein, high moisture content and low acidity environments.
Dry foods can also become dangerous once they have been cooked. Examples of such foods are rice, pasta, lentils, beans and chickpeas. Adding water to these during cooking means that they are now also high protein, high moisture and low acidity foods.

3.b) Cross-contamination (slide 9)
The other way food becomes contaminated with bacteria is when it is transferred from another place, whether it is your hands, clothes, pets, the bench, a dirty utensil, or a high-risk food, onto another food through contact. Germs are everywhere, and for this reason it is important to wash your hands before preparing food or eating, and also to use clean equipment. Food should always be kept covered when it’s stored to prevent this kind of contamination. For this reason, it is also a good idea to store raw meat at the bottom of the fridge, and in a suitable container, to prevent any of its juice dripping onto another food.

3.c) Temperature and time (slide 10-11)
Bacteria grow best at certain temperatures. The temperature range of 5°C to 60°C is called the temperature danger zone, as most bacteria will grow quite well between these temperatures, especially at room or body temperature. Below 5°C, bacteria are “dormant” and their growth is slowed or stopped. This means that food in the fridge or freezer stays safe for longer periods. Above 60°C, bacteria start to be killed by the high temperature. This is why it is important to cook food thoroughly. The amount of bacterial growth that occurs depends on how long food is kept in this dangerous temperature range. Bacteria can double in number every 20 minutes, so the longer the food is out the more chance there is of enough bacteria growing to make someone very sick.

4. Food Safety Messages (slide 12)
There are five key food safety messages which help prevent food poisoning. These are:
Cook high-risk foods thoroughly
Handle food safely
Keep cold food cold and hot food hot
Keep kitchen clean and free of pests, and
Keep hands and nails clean

Ask group if they can see the link between these messages and the concepts previously mentioned.

4.a) Cook high-risk foods thoroughly (slide 13)

High risk foods were mentioned earlier, and these include things like raw meat, fish, poultry and eggs. These foods need to be cooked before you can eat them to kill the bacteria. Having said this, some meats are even more dangerous than others. Usually,
most bacteria are contained towards the outside of the meat, where it is closer to air contact. For natural cuts of meat, like steak, it is okay to consume these a little bit rare because the bacteria on the outside would have been killed. However, processed meats like sausages, mince and rolled roasts need to be cooked thoroughly the whole way through, as some of the meat from the outside, which contains the bacteria, is now on the inside due to the mixing and mincing processes. Small animals, such as poultry and fish, are also dangerous because more of the flesh has come into contact with the animal’s gut, and this is a major source of bacteria. For this reason, they should always be cooked thoroughly the whole way through.

4.b) Handle food safely (Slide 14)

Handling food safely is about preventing cross contamination. This means washing hands before preparing or eating food, using clean equipment and utensils, and avoiding touching food too much. Raw meats should be kept separate from ready to eat foods, foods should be kept covered, and it’s a good idea to wear an apron. Also, sick people shouldn’t prepare food as they may contaminate it with their germs.

4.c) Keep Cold Food Cold and Hot Food Hot (Slide 15)

High-risk foods need to be kept out of the temperature danger zone to slow bacterial growth. They should be stored in the fridge (below 5°C) or freezer (below -15°C). Once they’ve been prepared, they should be eaten while they’re still hot. This may mean keeping them in a hot oven (above 60°C) if there is a small delay before it can be eaten. Otherwise, the prepared food needs to be cooled and stored in the fridge, before being re-heated quickly until it is steaming hot. Whilst frozen meat is thawing, it also needs to be kept out of this temperature danger zone. This means that it should be thawed either in the fridge, below 5°C, which takes time and preparation, or quickly in the microwave immediately prior to cooking.

4.d) Keep Kitchen Clean and Free of Pests (Slide 16)

Keeping the kitchen clean is important in preventing bacterial growth and discouraging pests from coming in. All equipment and utensils should be washed in hot soapy water and allowed to air dry, or dried with a clean tea towel, after use. Benches need to be wiped down with a soapy cloth to remove any food residue, as bacteria could grow on this. Food should also be kept covered, to prevent any contact with pests, like flies which are very common in summer. Food that was packaged also needs to be resealed once it has been opened, which may mean storing it in air-tight containers if the packet isn’t resealable.

4.e) Keep hands and nails clean (Slide 17)

Hands need to be washed prior to food preparation or consumption, as they often come into contact with sources of germs and are an agent in cross-contamination. Warm water and soap should be used, and it may be necessary to clean nails with a nail brush. It is also very important to dry hands with a clean towel after they’ve been washed, as moisture helps transfer bacteria. Cuts also need to be covered as germs may spread from here.
5. Activities (Slide 18-19 intro, slides 20-28 recap)

Refugees need assistance with food safety messages in a variety of situations, as they may not be accustomed to our procedures and behaviours regarding shopping, food storage, food preparation, and eating food away from home. The following group activities are designed so that people get practice in applying food safety concepts to different situations, and can identify and communicate the appropriate measures to promote food safety. Presenting role-plays to the group will ensure that everyone has some familiarity with food safety in each situation.
Activity One: The Kitchen
You are showing a new family around their kitchen. Point out some of the dangerous appliances, and make sure they know how to avoid injuries. Use the kitchen safety resources to remind them.

Activity Two: Shopping
Food safety begins with the food purchasing behaviours. Work with a partner to develop a role-play focusing on a shopping trip. One person is unfamiliar with shopping, and the other person is accompanying them and helping them shop. This is a good opportunity to promote some food-safe behaviour.

In this role-play, you need to communicate food safety messages about the temperature danger zone.

The shopping list includes:
- Bread
- Milk
- Fruit and vegetables
- Tinned tuna
- Ice cream
- Rice
- Hot chicken
- Meat for one week
- Herbs and spices
- Watermelon seeds
- Beans

The last three items are to be bought from a specialty store, whilst the others are available at a supermarket.

Consider:
- Order of purchases
- Packing the trolley
- Going home

Activity Three: Food Storage
You have just arrived at the home of a refugee family as they are arriving home from grocery shopping. Unfortunately, they are not familiar with shopping for more than one day at a time and do not know how best to store food. Amongst the items bought are tinned tuna, bread, milk, ice cream, herbs, lettuce, oranges, unripe tomatoes, carrots, bananas, apples, lots of meat, a hot chicken, rice, frozen vegetables, tinned vegetables, and some beans. Advise them on the best way to store these items. Use the poster “Some foods belong in the fridge…”, which has conveniently been affixed to their fridge beforehand, to help you explain it. Present your role-play to the group.
Make sure you cover:

- Foods that can be kept at room temperature
- Foods that must be kept in the fridge
- Prolonging the life of meat by freezing it

The information in the “Meat: Storage and Preparation” resource may also help you.

This table provides the approximate storage life of frozen meat products, but relates to quality rather than safety. Storing foods for long periods of time may result in some taste or texture changes that make it not as nice to consume, and it may be handy to point this out!

<table>
<thead>
<tr>
<th>Product</th>
<th>Approximate frozen storage life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef/lamb roasts</td>
<td>4-6 months</td>
</tr>
<tr>
<td>Ground beef mince</td>
<td>2-3 months</td>
</tr>
<tr>
<td>Sausages</td>
<td>1-2 months</td>
</tr>
<tr>
<td>Beef Steaks</td>
<td>3-4 months</td>
</tr>
<tr>
<td>Beef/Lamb Casserole</td>
<td>2-3 months</td>
</tr>
<tr>
<td>Lamb chops</td>
<td>2-3 months</td>
</tr>
<tr>
<td>Offal</td>
<td>1 month</td>
</tr>
<tr>
<td>Whole chicken</td>
<td>4-6 months</td>
</tr>
<tr>
<td>Chicken portions</td>
<td>3 months</td>
</tr>
<tr>
<td>Lean fish (eg. Whiting)</td>
<td>4 months</td>
</tr>
<tr>
<td>Oily fish (eg. Mackerel)</td>
<td>3 months</td>
</tr>
</tbody>
</table>

(Source: Meat and Livestock Australia Food Safety Campaign Group: Food Safety in the Home)

Activity Four: School Lunches

Present a role play to the group where you advise a refugee on a packing a suitable school lunch. Explain what facilities are available to the child at school for food storage and preparation – in most cases, this will probably be none. Communicate the keep cold food cold and hot food hot message, explaining the background temperature danger zone concept. Also provide some hints about keeping the lunchbox cool.

Activity Five: Home food preparation

Community Nutrition Unit
Annerley Road Community Health
Queensland Health
(07) 30103550
Brainstorm all the food and kitchen safety issues involved in the preparation of two course meal, consisting of a meat and vegetable stew, served with rice, followed by a fruit salad for dessert. Think about equipment, utensils, and pay attention to high risk foods and ready to eat foods. Share your ideas with the group.

**Activity Six: Leftovers**

You have been helping a refugee family for one week. Yesterday, you observed them eating left over rice from a pot which had obviously been sitting out overnight. Explain to them (and the group) why this is not such a good idea, and how they can safely store leftovers to consume later.

**Activity Seven: Picnics and Barbeques**

A family you know has made friends and have been invited to a barbeque in the local park for the first time. They ask your advice on what foods to take, how to take it and how to cook it. You tell them to take some steak, sausages, salad, bread, and juice for the children. Explain to them the facilities available at the park, and how to store and transport these foods on the day, and how to cook the food. Work in a group to prepare a role-play, as you demonstrate packing an esky and communicate aspects of food safety including temperature, cross-contamination, high-risk foods, and handling food safely.

The next slides are used as a check list to make sure that the food safety issues are identified.

**6. Overview of key points (Slide 29)**

Recapping the major points of the presentation, high-risk foods often contain bacteria and include raw meats, dairy, eggs, cooked rice, pasta and vegetables, and these need to be kept away from other foods and out of the temperature danger zone, which promotes bacterial growth. Washing hands, covering food and storing it correctly, keeping the kitchen clean and using clean utensils and equipment helps to prevent cross-contamination of foods.

**7. Quick Review Quiz (Slides 30-34)**

A quick quiz will help to evaluate the level of learning that has occurred. Correct answers are shown in red.

**QUIZ**

1. Which of the following is likely to cause food poisoning? (Can choose more than one)
   a) storing eggs in the pantry
   b) eating leftovers which were cooled in the fridge and reheated until steaming hot
   c) buying ‘high-risk’ foods last in the shopping trip
   d) using the same cutting board to chop raw meat and salad vegetables
e) giving children frozen poppers or water bottles in their lunch to keep their sandwiches cool

2. All of these foods are high-risk: (can choose more than one)
   a) dried lentils, a banana, bread
   b) chicken, cooked rice, milk
   c) flour, milk powder, tinned beans
   d) cheese, eggs and mince

3. Where can bacteria be found? (you can choose more than one)
   a) On meat
   b) On your hands
   c) On the kitchen bench
   d) On pets
   e) In cooked rice

4. What are the food safety messages?
   Keep cold food cold and hot food hot, keep hands and nails clean, handle food safely, keep the kitchen clean and free of pests, cook high risk foods thoroughly

5. It would be appropriate to talk to a client about food safety if you noticed them:
   a) Storing milk on the bench
   b) Not refrigerating leftovers
   c) Packing ‘high-risk’ foods in their child’s lunch
   d) Washing a toaster in the sink
   e) Eating ‘rare’ sausages or chicken

Questions? Thank everyone for participating!