**Learn from a UK food safety advisor about the food safety hazards and risks and how to avoid them**

Wayne Blything, UK food safety advisor, has shared his expertise on food safety and what the responsibilities are for organisations.

You can watch his presentation here ( embed video which can be found [here](https://komosievzw.sharepoint.com/:v:/r/sites/flavour/Gedeelde%20documenten/WP3/Training%20guide/Training%20guide%20content/Module%201%20Food%20hygiene%20and%20safety/introduction%20and%20animations/wayne%20food%20safety.mp4?csf=1&web=1&e=tVV3zd) ) or read a summary below

The four food safety hazards

Food distribution platforms have responsibility to control and consider four food safety hazards within the workplace, either by preventing them from contaminating our food or by reducing them to acceptable levels.

**1)** **chemical hazards**. These consist of things such as; cleaning chemicals, pesticides, pest proof chemicals. The risk from these can be reduced by storing them in a specific cupboard just for chemicals and by following the instructions on how to use them. Chemicals can also occur naturally in food such as; poisons within uncooked kidney beans or green potatoes, acrylamide in starchy food such as chips that are cooked on a high temperature. The risk from these can be reduced by storing and cooking food properly.

2) **Allergens**. 1-2% of adults and 6-8% of children in the UK suffer from food allergies. And often it can take only a small amount of the allergen to cause an allergic reaction. The most effective way to reduce the risk of allergens is to prevent food being cross contaminated. You do this by carrying out a risk assessment and also keeping any allergens completely separate from other food. If you are including possible allergens in dishes, then you need to list all the ingredients on the label and show the allergens. This information should be provided to customers so that they can make an informed choice as to whether or not they want to purchase this food.

In Europe legislation is in place that requires that food operators apply labels that include full allergen and ingredient lists to any products that are unpacked and prepacked for direct sale.

3) **Physical hazards** in the workplace, which are extremely common. These can be for instance, pests, broken packaging, broken glass, or hair. These can be removed and prevented through regular cleaning and safely removing any hazards when you see them.

4) **microbiological hazards or microorganisms**, which consist of; viruses, mould, yeast and bacteria. The multiplication and survival of these microorganisms has to be managed within the workplace. You cannot see, taste or smell micro-organisms, so you should not only rely on your senses. You can only identify them by sending the food away for testing.

Microorganisms need four things to survive or multiply: time, moisture, warmth and nutrients. By removing any one of them, it helps you to control these hazards.

It is also important to recognize the difference between high and low risk food. **High risk food** are high in protein, they can support microorganism growth, they are high in moisture content and they have a ‘used by date’ on them. This is a legal requirement. You cannot use high risk food past the used by date.

**Low risk foods** usually have preservatives added to them. They are low in moisture , they are low in water activity and they have a ‘best before date’ on them. When past their best before date, it is not illegal to sell them as long as they do not cause harm to the customer. The exception are eggs. They should not be used after the best before date but if they are you need to be sure that they are fully cooked, because the chance that they contain harmful bacterias, such as salmonella, increases every day past the best before date.

**Three areas of food safety**

By putting in place these three areas of food safety, you can reduce the risk of all the food hazards.

**1) Hygiene practices** refer to the necessary control measures you need to put in place to prevent cross contamination within the workplace. Cross contamination refers to the transference of an unwanted substance, usually harmful, from product A to product B, such as microbes or allergens.

Ways to prevent cross contamination in the workplace:

* Cleaning chemicals should be stored safely and you should always follow the cleaning manufacturers instructions regarding concentration and contact time.
* Use gloves when using chemicals to clean
* Use separate equipment (you could colour code it) for vegetables, fish, raw meant and cooked
* Separate preparation areas for raw meat, cooked meat, vegetables and fish
* Regular and good hand washing
* Wash fruit and vegetables because unwashed they are a high risk because they may be contaminated with a low dose of organisms such as E.coli.
* All staff to follow good personal hygiene practice

To ensure safe food preparation, cooking, re-heating, cooking and storage of food should be demonstrated.

Temperature control requirements ensure that bacterias do not get the chance to survive or multiply:

* Frozen food should be kept below maximum 18 degrees Celsius
* Fridge temperature should be set between 3 and 4 degrees Celsius
* Cooking should be at at least 75 degrees Celsius for at least 30 seconds
* Hot holding food should be at a minimum of 63 degrees Celsius

Storage:

* Common sense applies
* Make sure that food is always covered and labelled

**2) Structure:** Premises and equipment should be clean and in good condition and there should be procedures in place for when repairs need to be made. There should also be evidence of effective pest control and waste disposal provision:

* There should be a dedicated handwashing basin in the kitchen with warm running water, soap and single used cloth or other hygienic means to dry your hands
* Pest control procedures should be in place. These include a pest contract and that you are checking for pests yourself and making sure that your premises is pest proof
* It is preferable to have separate sinks in place for raw and cooked food. When using single used sinks you need adequate cleaning procedures in place
* Do not allow waste to pile up and accumulate in the kitchen
* Use foot operated bins
* Waste that has been put outside should be kept in closed containers

**Paperwork**. Food safety management/procedures should be in place and followed to show how you are identifying and managing hazards. Your food safety management records should be appropriate and maintained. All staff should be suitably supervised, instructed and/or trained. This is your due diligence record in court in case something goes wrong.

The complexity of your food safety system depends on the size of your operation, your customer base and the food that you serve.