



BASIC HYGIENE PRINCIPLES



Aim

The aim of this guide is to introduce the basic principles behind reducing the potential of a food hygiene hazard to cause adverse human health effects. This guidance covers the whole process from culling through to processing and transport. Detailed information is provided in supporting guides identified in table 1 overleaf.

HACCP – (Hazard Analysis and Critical Control Point)

All who are involved in producing and preparing food, which includes stalkers operating under the exemptions provided for in the EC Food Hygiene Regulations, are responsible for making sure that, as far as possible, the food supplied is safe to eat. Those involved in processing (as opposed to those who only ever supply in-skin carcasses) also have to put in place food safety management procedures based on the HACCP (Hazard Analysis & Critical Control Point) principles.¹ (Note: A Critical Control Point (CCP) is a point, step or procedure at which controls can be applied and a food safety hazard can be prevented, eliminated or reduced to acceptable (critical) levels).

To produce safe food for consumers, all the important safety hazards that are associated with the production of food need to be prevented, eliminated or reduced to an acceptable level. These food safety hazards may be biological, physical or chemical (see table 1 overleaf).

The HACCP principles provide a systematic way of identifying food safety hazards, making sure they are being managed responsibly by the food business operator and showing this is being done day-in, day-out. In short this involves the following steps:

- ◆ **Plan:** Decide what needs to be done to maintain food safety and write it down;
- ◆ **Do:** Do what you said you would do;
- ◆ **Check:** Check that you are doing what you planned to do and write down what was checked and when;
- ◆ **Act:** Take action to correct any food safety problems and write down what has been done about the problem and when.

Hygiene hazards

In order to produce safe food for consumers, the hazards associated with the production of food need to be identified, then prevented, eliminated or reduced to an acceptable level. These food safety hazards are categorised in table 2 overleaf.

Temperature conditions

Certain types of bacteria can double their number within 30 minutes. The number of bacteria required to cause illness on a healthy adult can be as few as only 10 (E.coli). Temperature controls must be maintained to minimise the hazard.

Temperature effect:

- ◆ -18°C to -20°C bacteria dormant
- ◆ $+1^{\circ}\text{C}$ to $+7^{\circ}\text{C}$ bacteria grow slowly
- ◆ $+8^{\circ}\text{C}$ to $+63^{\circ}\text{C}$ DANGER ZONE bacteria multiply explosively
- ◆ $+100^{\circ}\text{C}$ bacteria mostly destroyed.

table 1

Category of hazard	Example	Risk	Supporting Guides
Biological – Bacteria/ Parasites	<ul style="list-style-type: none"> ◆ Harmful food poisoning bacteria such as <i>E. coli</i> O157, <i>Salmonella</i> and <i>Campylobacter</i> Carried in the gut of healthy animals and then excreted and carried on hide/hair ◆ Tuberculosis ◆ Liver fluke 	<ul style="list-style-type: none"> ◆ Transferred to meat during gralloching, extraction, larding and preparation ◆ Transferred through worker's hands, knives, surfaces, water ◆ Can grow during production, processing, storage and transport if temperature conditions in particular are suitable (See box below) ◆ Although there are no human health implications associated with fluke infestation part or all of the liver may be removed for aesthetic reasons 	<ul style="list-style-type: none"> ◆ BPG Deer Health ◆ BPG Notifiable Diseases ◆ BPG Carcass Inspection ◆ BPG Gralloching ◆ BPG Mechanical & Manual Extraction ◆ BPG Larding
Chemical	<ul style="list-style-type: none"> ◆ Residues from feed additives ◆ Residues from veterinary medicines (such as Immobilon) ◆ Splashing/contact cleaning fluids ◆ Contact with petrol/oil in vehicle 	<ul style="list-style-type: none"> ◆ Residues may not be broken down by cooking process and can poison humans ◆ Residues transmitted to people when raw or undercooked meat consumed 	<ul style="list-style-type: none"> ◆ See BPG Diversionary & Supplementary Feeding
Physical	<ul style="list-style-type: none"> ◆ Jewellery, tags, clips, rubber bands ◆ Fragments of bullet and bone ◆ Dust, rust, dead insects ◆ Live insects, fly blow 	<ul style="list-style-type: none"> ◆ Cause physical injury if ingested 	<ul style="list-style-type: none"> ◆ See BPG Larding

 table 2

Basic actions to reduce hygiene hazard	
Prevent contamination from individuals to food products by:	<ul style="list-style-type: none"> ◆ Tying hair away ◆ Operator maintaining a high degree of personal hygiene
Wash hands to prevent contamination:	<ul style="list-style-type: none"> ◆ Before starting work ◆ After touching raw food especially meats ◆ After going to the toilet ◆ After a break or leaving the larder
When working in food areas :	<ul style="list-style-type: none"> ◆ Wear clean clothes or protective garments ◆ Do not touch your face or hair ◆ Cover cuts and sores with clean waterproof dressings ◆ Do not cough or sneeze over food products ◆ Do not wear jewellery, which may fall into food
Prevent contamination from you to food product through cuts and skin ailments by:	<ul style="list-style-type: none"> ◆ Covering cuts with blue food safe dressings and wear gloves ◆ Seeking medical advice
When suffering from diarrhoea/vomiting/ stomach upset/skin condition:	<ul style="list-style-type: none"> ◆ Do not work in the larder or food preparation area or handle food ◆ Ensure any individual who shows signs of this kind leaves the food preparation area right away ◆ Anyone suffering from these symptoms should not return to work until 24 hours after the symptoms have stopped
When returning from the field with dirty or soiled clothing:	<ul style="list-style-type: none"> ◆ Wear washable apron or change into clean clothes and clean footwear before beginning work in the larder
Prevent cross contamination when using knives or saws by:	<ul style="list-style-type: none"> ◆ Cleaning tools thoroughly between carcasses

¹ Further detailed information is available from <http://www.food.gov.uk/foodindustry/meat/draftwildgameguidance>