

CARCASS BASIC HYGIENE

ENGLAND & WALES
BEST PRACTICE GUIDES

the deer
initiative




Introduction

The aim of this guide is to highlight the basic principles behind reducing the potential of a food hygiene hazard to cause degradation of carcasses intended for human consumption. This guide links to the following guides in this series: Gralloching, Carcass inspection and Larder hygiene and safety.

Hazards

There are 3 categories of food hygiene hazard, these are tabulated below together with examples and the risks associated with them.

Category of hazard	Example	Risk
Biological	<ul style="list-style-type: none"> ◆ Harmful food poisoning bacteria such as E. coli O157, Salmonella and Campylobacter ◆ Diseases ◆ Parasites ◆ Contamination from fly blow, dogs, vermin 	<p>Transferred during gralloching, extraction, lardering and preparation via worker's hands, knives, surfaces, water. Can grow during processing, storage and transport. Could be transmitted directly from carcass</p> <p>May infest/bite/be ingested by humans.</p> <p>Causes spoiling and possible food poisoning.</p>
Chemical	<ul style="list-style-type: none"> ◆ Cleaning fluids ◆ Petrol/oil and other chemicals carried in vehicles or in environment ◆ Residues from veterinary medicines (such as Immobilon) 	<p>Chemicals or residues may cause harm on contact or if ingested. Residues may not be break down in raw meat or during cooking process.</p>
Physical	<ul style="list-style-type: none"> ◆ Vegetation, soil, dead insects, jewellery, tags, clips, rubber bands, sticky plasters, fragments of bullet and bone dust, rust, flaking paint ◆ Damage to carcass 	<p>Contamination of carcasses.</p> <p>Some objects may be harmful if ingested.</p> <p>Shot or other physical damage during transport or preparation could render meat unfit or hasten it's deterioration</p>

Controls

The procedures for handling carcasses are dealt with in the Gralloching, Carcass Inspection, and Larder guides but there are a number of aspects of basic hygiene practice designed to prevent contamination known as “controls” which are outlined in the table below.

Basic actions to reduce hygiene hazard (controls)	
When working with food:	Maintain a high degree of personal hygiene Wear clean clothes or protective garments Do not touch your face or hair Do not cough or sneeze over food products Do not wear jewellery or other items which may become soiled or fall into food Do not eat, drink, or smoke
Wash hands to prevent contamination:	Before starting work Frequently during work to avoid soiling carcass After touching raw food especially meats After going to the toilet After a break or leaving the larder
Prevent contamination from cuts and skin ailments by:	Covering cuts with blue food safe dressings and/or wearing gloves Seeking medical advice if unsure
When suffering from diarrhoea/vomiting/ stomach upset/transmissible skin condition:	Do not handle carcasses or work in the larder or food preparation area Anyone suffering from these symptoms should not return to work until 24 hours after the symptoms have stopped
Before beginning work in, or when returning to, the larder	Put on a washable apron and /or change into clean clothes and clean footwear
Prevent cross contamination by:	Minimising contact with anything not essential to the food process. Keeping work areas properly cleaned. Cleaning tools(especially knives and saws), other equipment and transport containers thoroughly between carcasses Use only single use, disposable wipes

Bacteria

Bacteria can cause illness by being ingested with food then reproducing in the body (as few as 10 (E.coli) bacteria can cause illness in a healthy adult) or by poisoning food as they grow on it. Bacteria need time (in 100 minutes 1000 bacteria can become 1 million), moisture, food, and warmth to multiply. Temperature controls must be maintained to minimise the hazard:

-18°C to -20°C bacteria dormant
+1°C to +7°C bacteria grow slowly
+8°C to +63°C (optimum 37°C) DANGER ZONE bacteria can multiply rapidly
+63°C and above, bacterial numbers reduce
+100°C bacteria mostly destroyed.

Sources include:
The environment, non-potable water, carcasses, raw food, all animals and their hair, droppings/urine, stomach contents, fly blow, dirty surfaces and equipment

Cleaning

Cleaning procedures can be split into a number of stages. Stages 1-5 should be followed in order for the cleaning of floors and walls and equipment such as hooks and gambrels. Work surfaces, knives and saws should be cleaned using 1-3 then either 6 or 7.

Stage	Method	Purpose
1. Pre-clean	Broom/brush, cold water	Remove debris
2. Main clean	Hot water (temp 75°C – 82°C) and detergent	Remove remaining physical/visible contamination, including grease, from surfaces
3. Rinse	Hot water	Remove detergent and contamination loosened by main clean
4. Disinfect	Chemical disinfectant. Can be left in contact but rinse before using again	Kill bacteria
5. Rinse	Hot water	Remove disinfectant and bacteria
6. Sanitise	Sanitiser for clean or lightly soiled surfaces Requires contact time to be effective, does not require rinsing. Applied with wipes	Kill bacteria. Applied to hard surfaces such as work surfaces and equipment to sterilise
7. Sterilise	Hot water steriliser or Ultra violet	Kill bacteria. Sterilising knives/saws only

Notes:

- ◆ Wipes- use only disposable dry wipes (e.g. blue coloured paper roll) on carcasses and wipe once only. Proprietary wet (e.g. probe wipes) wipes can be used on surfaces or equipment.
- ◆ Water – washes away some contamination but can spread it, do not attempt to wash away contamination on carcasses. Avoid splashing carcasses when cleaning. Water must be of potable (drinkable) quality.
- ◆ All products should be approved for food use, ALWAYS FOLLOW MANUFACTURERS INSTRUCTIONS AND WEAR PROTECTIVE CLOTHING WHERE APPLICABLE.

Storage

Carcasses and meat products must be kept in cool, well ventilated conditions to prevent or slow the growth of bacteria and mould. The concept of a “cold chain” should be followed where a fresh carcass or meat from it, once cooled to below 7°C should not be allowed to rise above that temperature again (see Larder Design guide).

Further Info

<http://www.food.gov.uk/>