# FOOD PREPARATION AND HANDLING

## 14.1 Health and hygiene

- (M+F) **14.1.1** Catering staff should have a basic knowledge of food safety and hygiene as they have a responsibility for ensuring that high standards of personal hygiene and cleanliness of the galley, pantry and mess rooms are always maintained. Further guidance is contained in MGN397 (M+F).
  - **14.1.2** There should be no smoking in galleys, pantries, store rooms or other places where food is prepared.
  - **14.1.3** Hands and fingernails should be washed before handling food using a dedicated hand-basin, a bacterial liquid soap from a dispenser and disposable towels or another individual method of hand drying such as a hot air dryer. It is important to wash hands after using the toilet, blowing your nose, or handling refuse or contaminated food.
  - **14.1.4** All cuts, however small, should be reported immediately and receive first aid attention to prevent infection.
  - **14.1.5** An open cut, burn or abrasion should be covered with a coloured waterproof dressing which must be changed regularly. Anyone with a septic cut or a boil, stye etc, should stop working with food until it is completely healed.
  - **14.1.6** Illness, rashes or spots, however mild should be reported immediately the symptoms appear.
  - 14.1.7 A person suffering from diarrhoea and vomiting, which are signs of

food poisoning, should not work in food handling areas until medical clearance has been given.

- **14.1.8** Catering staff should wear clean protective clothing when handling food and preparing meals.
- **14.1.9** Catering staff should not wear jewellery apart from a plain wedding band.
- **14.1.10** Cleanliness of all food, crockery, cutlery, linen, utensils, equipment and storage is vital. Cracked or chipped crockery and glassware should be destroyed. Foodstuffs which may have come into contact with broken glass or broken crockery should be thrown away.
- **14.1.11** As a general rule fresh fruit and salad should be thoroughly washed in fresh water before being eaten.
- **14.1.12** Foodstuffs and drinking water should not be stored where germs can thrive. Frozen food must be defrosted in controlled conditions, i.e. an area entirely separate from other foods in cool conditions. Food should be prevented from sitting in the thaw liquid by placing it on grids in a container or on a shelf. Deep frozen food which has been defrosted is not to be refrozen.
- **14.1.13** The risks of cross contamination should be eliminated by thoroughly stripping and cleaning the relevant parts of equipment when successive different foods are to be used (especially raw and cooked foods). It is important to wash hands after handling raw meat, fish, poultry or vegetables.
- **14.1.14** Raw food should be kept apart from cooked food or food that requires no further treatment before consumption (eg milk). Separate refrigerators are preferred although if stored in the same unit, the raw food

must always be placed at the bottom to avoid drips contaminating ready prepared food. Food should also be covered to prevent drying out, crosscontamination and absorption of odour.

- **14.1.15** Separate work surfaces, chopping boards and utensils should be set aside for the preparation of raw meat and must not be used for the preparation of foods which will be eaten without further cooking. Colour coding is an established way of ensuring separation between the two activities.
- **14.1.16** Ensure all food is kept at the correct temperature to prevent the multiplication of bacteria.
- **14.1.17** Crockery and glassware should not be left submerged in washing up water where it may easily be broken and cause injury. Such items should be washed up individually as should knives and any utensils or implements with sharp edges. Crockery, glassware and utensils should preferably be washed in a dishwasher, where much higher temperatures can be achieved compared with hand washing.
- **14.1.18** Some domestic cleaning substances contain bleach or caustic soda (sodium hydrochloride) whilst some disinfectants contain carbolic acid (phenol). These substances can burn the skin and they are poisonous if swallowed. They should be treated with caution and should not be mixed together or used at more than the recommended strength. Inadvertent contact with toxic chemicals or other harmful substances should be reported immediately and the appropriate remedial action taken. Cleaning substances, materials, should be stored in a suitable locker/cupboard separate from food handling areas.
- **14.1.19** Food waste, empty food containers and other garbage are major sources of pollution and disease and should be placed in proper storage facilities safely away from foodstuffs. Their discharge into the sea is prohibited

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except in circumstances specified in Merchant Shipping Notice MSN 1807 (M+F).

### 14.2 Slips, falls and tripping hazards

- **14.2.1** Suitable footwear, preferably with slip-resistant soles, should be worn at all times. A large proportion of injuries to catering staff arise because they wear unsuitable footwear such as sandals, plimsolls or flip-flops, which do not grip greasy decks or protect the feet from burns or scalds if hot or boiling liquids are spilt.
- **14.2.2** Decks, and particularly stairs, should be regularly maintained so that cracks and worn areas do not cause a trip hazard.
- **14.2.3** Decks and gratings should be kept clear from grease, rubbish and ice etc to avoid slipping. Any spillage should be cleared up immediately.
- **14.2.4** Broken glass or crockery should be cleared away with a brush and pan never with bare hands.
- **14.2.5** The area of deck immediately outside the entrance to refrigerated rooms should have an anti-slip surface.
- **14.2.6** Care should always be taken when using stairs and companionways; one hand should always be kept free to grasp the handrail.
- **14.2.7** Trays, crates, cartons etc should not be carried in such fashion that sills, storm steps or other obstructions in the path are obscured from view.
- **14.2.8** Lifts that involve reaching up too high or too low should be avoided. Personnel should not stand on unsecured objects to reach articles which are out of reach.

### 14.3 Galley stoves, steamboilers and deep fat fryers

**14.3.1** Ships using oil fired stoves should operate safety procedures

according to manufacturers' instructions, particularly when lighting the stove. Instructions should be clearly displayed in the galley.

- **14.3.2** Catering staff should not attempt to repair electric or oil-fired ranges or electric microwave ovens. Defects should always be reported so that proper repairs may be made. The equipment should be kept out of use and a warning notice displayed until it has been repaired.
- **14.3.3** The indiscriminate use of water in hosing down and washing equipment in the galley can be very dangerous, particularly when there are electrical installations. Whenever the galley deck is washed down, power to an electric range and all electric equipment should be switched off and isolated from the supply and water kept from contact with the electric equipment.
- **14.3.4** Range guard rails should always be used in rough weather. Pots and pans should never be filled to the extent that the contents spill over when the ship rolls.
- **14.3.5** All catering staff should be fully instructed in avoiding burns from hot surfaces on hot serving tables, bain marie, steamers and tilting pans.
- **14.3.6** Dry cloths or pot holders and oven gloves (long enough to cover the arms) should always be used to handle hot pans and dishes. Wet cloths conduct heat quickly and may scald the hands.
- **14.3.7** No one should be directly in front of an oven when the door is opened the initial heat blast can cause burns.
- **14.3.8** The steam supply to pressure cookers, steamers and boilers should be turned off and pressure released before their lids are opened.

# 14.4 LPG appliances

**14.4.1** Suitable means for detecting the leakage of gas should be provided

and securely fixed in the lower part of the galley as gas is heavier than air. A gas detector should incorporate an audible and a visible alarm, and should be tested frequently. A suitable notice, detailing the action to be taken when an alarm is given by the gas detection system should be prominently displayed.

- **14.4.2** Equipment should be fitted, where practicable, with an automatic gas shut-off device which operates in the event of flame failure.
- **14.4.3** When gas burning appliances are not in use the controls should be turned off. If they are not going to be used again for some length of time, the main regulators close to the storage bottles should be shut. MGN 312(F) gives further guidance on the operation of L.P.G. appliances.
  - **14.4.4** A safe system of working, training and supervision over lighting and operating procedures should be established.
  - **14.4.5** Defects in joints, valves and connections can be detected by smell. Catering staff should not attempt to repair electric, oil or gas appliances.

### 14.5 Deep fat frying

- **14.5.1** Water should never be poured into hot oil; the water turns to steam, throwing the oil considerable distances. This may cause severe burns to personnel, and possibly start a fire.
- **14.5.2** If fat catches fire in a container, the flames should be smothered using a fire blanket if practicable and the container removed from the source of heat. Otherwise a suitable fire extinguisher should be used. In no circumstances should water be used.
- **14.5.3** The flash point of the cooking medium should be no lower than  $315^{\circ}$ C (600°F).

- **14.5.4** Deep fat fryers should be provided with suitable safety lids which should be kept in position when the fryers are not in use.
- **14.5.5** To minimise the risk of fire from failure of the control thermostat all deep fat fryers should be fitted with a second thermostat set to provide a thermal cut-out.
- **14.5.6** Electrically operated deep fat fryers should be switched off immediately after use.
- **14.5.7** A safe system of work for cleaning and draining fat fryers should be established.
- **14.5.8** A strict schedule of cleaning for galley uptakes/grills should be established so that fat deposits are not allowed to accumulate.
- **14.5.9** A notice should be prominently displayed detailing the action to be taken in the event of a deep fat fryer fire.

#### 14.6 Microwave ovens

- **14.6.1** When microwave ovens are used, it is important to ensure that the food is cooked thoroughly and evenly. This is particularly important with deep frozen foods which should be thoroughly defrosted before cooking. The instructions issued by the oven manufacturers should be followed carefully in conjunction with the information on the packaging of the foodstuff.
- **14.6.2** No microwave oven should be operated if the oven door or its interlock is out of use, the door broken or ill-fitting or the door seals damaged. Each microwave oven should carry a permanent notice to this effect. Microwave radiation checks should be carried out at regular intervals.

### 14.7 Catering equipment

- **14.7.1** Except under the supervision of an experienced person, no one should use catering equipment unless trained in its use and fully instructed in the precautions to be observed.
- **14.7.2** Dangerous parts of catering machines should be properly guarded and the guards kept in position whenever the machine is used.
- **14.7.3** Any machine or equipment that is defective in its parts, guards or safety devices should be reported and taken out of service, with power disconnected, until repaired.
- **14.7.4** When a power-operated machine has to be cleaned or a blockage in it removed, it should be switched off and isolated from the power supply. Some machines will continue to run down for a while thereafter, and care should be taken to see that dangerous parts have come to rest before cleaning is begun.
- **14.7.5** A safe procedure for cleaning all machines should be established and carefully followed. Every precaution should be taken where cutting edges, for example on slicing machines, are exposed by the necessary removal of guards to allow thorough cleaning. Guards should be properly and securely replaced immediately the job is done.
- **14.7.6** Unless properly supervised, a person under 18 years of age should not clean any power operated or manually driven machine with dangerous parts which may move during the cleaning operation.
- **14.7.7** Appropriate implements, not fingers, should be used to feed materials into processing machines.
- **14.7.8** Electrical equipment should not be used with wet hands.

**14.7.9** All electrical equipment should be regularly inspected by a competent person.

#### 14.8 Knives, saws, choppers etc

- **14.8.1** Sharp implements should be treated with respect and handled with care at all times. They should not be left lying around working areas where someone may accidentally cut themselves. They should not be mixed in with other items for washing up but cleaned individually and should be stored in a safe place.
- **14.8.2** Knives should be kept tidily in secure racks or sheaths when not in use.
- **14.8.3** The handles of knives, saws, choppers etc should be securely fixed and kept clean and free from grease. The cutting edges should be kept clean and sharp.
- **14.8.4** Proper can openers in clean condition should be used to open cans; improvisations are dangerous and may leave jagged edges on the can.
- **14.8.5** Chopping meat requires undivided attention. The chopping block must be firm, the cutting area of the meat well on the block and hands and body clear of the line of strike. There must be adequate room for movement and no obstructions in the way of the cutting stroke. Particular care is required when the vessel is moving in a seaway.
- **14.8.6** Foodstuffs being chopped with a knife should not be fed towards the blade with outstretched fingers. Fingertips should be bent inwards towards the palm of the hand with the thumb overlapped by the forefinger. The knife blade should be angled away from the work and so away from the fingers.

- **14.8.7** A falling knife should be left to fall, not grabbed.
- **14.8.8** A meat saw should be guided by the forefinger of the free hand over the top of the blade. The use of firm even strokes will allow the blade to feel its way; if forced, the saw may jump possibly causing injury.

#### 14.9 Refrigerated rooms and store rooms

- **14.9.1** All refrigerated room doors should be fitted with means both of opening the door and of sounding the alarm from the inside.
- **14.9.2** A routine testing of the alarm bell and checking of the door clasps and inside release should be carried out regularly, at least at weekly intervals.
- **14.9.3** Those using the refrigerated room should make themselves familiar with the operation, in darkness, of the inside release for the door and the location of the alarm button.
- **14.9.4** All refrigerated room doors should be fitted with an arrangement of adequate strength to hold the door open in a seaway and should be secured open while stores are being handled. These doors are extremely heavy and can cause serious injury to a person caught between the door and the jamb.
- **14.9.5** Anyone going into a refrigerated room should take the padlock, if any, inside with him. Another person should be informed.
- **14.9.6** Cold stores or refrigerated rooms should not be entered if it is suspected that there has been a leakage of refrigerant. A warning notice to this effect should be posted outside the doors.
- **14.9.7** All stores and crates should be stowed securely so that they do not shift or move in a seaway.

- **14.9.8** When wooden boxes or crates are opened, protruding fastenings should be removed or made safe.
- **14.9.9** Metal hooks not in use should be stowed in a special container provided for the purpose. Where hooks cannot be removed they should be kept clear.