11 - Food and Catering

The MLC Minimum Requirements Regulations, in Part 8, include provisions covering food and catering for seafarers working on merchant ships, commercially operated yachts, and other sea-going vessels, following Regulation 3.2, Standard A3.2, and, where applicable, Guideline B3.2 of the International Labour Organization (ILO) Maritime Labour Convention, 2006.

> *The company requires all yachts, including pleasure vessels, to adhere to the same regulations, even if they are not typically subject to them under normal circumstances.*

- The Master must ensure that food and drinking water of suitable quality, nutritional value, and quantity are provided free of charge to meet the needs of all persons on board.
- Bacterial contamination poses the most significant threat to food and freshwater safety.
- Individuals involved in preparing or serving food must be properly trained and able to demonstrate a solid understanding of food hygiene principles and best practices.
- A preventive approach—using risk assessments, checklists, and established procedures—is one of the most effective ways to ensure the safety of food and drinking water on board.

TABLE OF CONTENT

References:

- Merchant Shipping (Maritime Labour Convention) Regulations 2014
- MSN1845 (M) - Food and Catering: Provision of Food and Fresh Water

1. GENERAL REQUIREMENTS

When providing food and drinking water on board, several factors must be considered, including the duration and nature of the voyage, the number of seafarers on board, and the quantity, nutritional value, quality, and variety of the food supplied. The religious and cultural dietary needs of the seafarers must also be respected.

The organisation of the interior department and the available equipment must support the preparation and service of adequate, varied, and nutritious meals in clean and hygienic conditions.

Food hygiene principles must be upheld at all times, regardless of the vessel's age, size, or type.

1.1. Provision of food and drinking water

The Master must ensure that food and drinking water provided on board meet the following standards:

- Are appropriate in terms of quantity, nutritional value, quality, and variety, taking into account the number of seafarers on board, the nature and duration of the voyage, and the diverse religious and cultural dietary requirements of the crew.
- Are free from any substances likely to cause illness, harm, or make the food or water unpalatable.
- Are safe and fit for human consumption.
- Are supplied to all seafarers free of charge while they are on board.
- Consists of adequate, varied, and nutritious meals prepared and served under hygienic conditions.

All galleys, storerooms, and sanitary facilities must be kept clean at all times, and all equipment and installations must be properly maintained and in good working order.

The company requires the Master to ensure that all catering personnel are appropriately trained or instructed for their roles. Anyone involved in food preparation must be trained in key areas such as food safety and personal hygiene, and should hold a recognised chef or cook certification.

1.2. Inspection of food and catering facilities and information

The master of a ship must ensure that, not less than once a week

- The supplies of food and drinking water on board are inspected,
- The equipment is inspected by a person authorised by the master, together with a member of the catering staff.
- The master must ensure that the results of any inspection the official logbook of the ship.

1.3. Health and Safety Issues

There are obvious hazards within the galley and store areas, such as wet and/or greasy decks, extreme temperatures and humidity, and congestion particularly around the galley range, and hot plate area. Cleaning materials, electrical appliances, fumes, knives, equipment such as deep fat fryers, brat pans and tilting kettles are also hazardous.

Practical control measures should be in place to reduce the risk of injury in the catering environment, for example:

- Anyone working in the catering areas should be provided with appropriate protective clothing and specialist anti-slip, protected toe caps, and footwear.
- Knives and other sharp utensils should not be left in a sink or washing-up bowl submerged in water,
- Stowage – items should be properly secured,
- Pots and pans should be secured during cooking and only filled to safe levels, particularly in heavy seas.
- Protective guards should be fitted on mechanical fans, food mixers and other kitchen equipment with exposed blades or other dangerous parts.
- Electrical equipment, including wiring in the galley and store areas should be regularly inspected by either a qualified member of the crew or a shore side contractor.
- Burns and scalds are common injuries. A first aid box should be provided either in the galley or a suitable area convenient to the galley. The contents of the first aid box should be checked and, when necessary, replenished at appropriate intervals. A notice stating the action to take if someone is burned or scalded should be prominently displayed in or close by the galley.
- The use of antibacterial hand cleaners, moisturising cream and barrier creams should be encouraged to reduce the risk of skin infections particularly dermatitis.

1.4. Diet and Nutrition

A good variety of food provides a healthy diet. Meals should provide a balance of carbohydrates, protein, fat, fibre, vitamins and minerals. Food should be prepared and cooked with minimum levels of salt, fat and sugar. As a general guide:

- -**Carbohydrates** are high-energy foods which include bread, potatoes, rice, pasta and breakfast cereals.
- **Proteins** including fish, meat, poultry, eggs, milk and other dairy products (check the fat content of some cheeses).

- **Vitamins and minerals** are contained in fruit and vegetables, fresh, frozen, dried and canned including fruit juice.
- **Drinks** as with food, a balanced intake is important. Not too much sugar, caffeine and calories. Water, fruit juices and low-fat milk are all good alternatives.

Provision should be made for any special needs because of religion, special dietary requirements, or customary dietary practices where certain rules or requirements in relation to some food or with the way food is prepared must be observed.

1.5. Food Allergies

Catering staff should be aware of the dangers associated with food allergies. If a person with a food allergy inadvertently eats even a small amount of that food, this can make them very ill or, in extreme cases, cause death. Some problematic ingredients are:

- Peanuts;
- Nuts;
- Gluten;
- Fish;
- Soya;
- Celery;
- Mustard;
- Sesame seeds
- Sulphur dioxide (E220)

This list is illustrative only, as there are likely to be other ingredients that can cause adverse reactions in persons who are sensitive to them.

1.6. Cross contamination with Food Allergens

Catering staff need to be aware of the risk of allergen cross-contamination in situations where a seafarer has asked for food to be free of a certain ingredient that they are allergic or intolerant to. Several steps can be taken to reduce the risk, including preparing the food from scratch, keeping surfaces clear of the allergen of concern, using separate utensils to prepare and serve the allergen-free food, avoiding transference of crumbs or seeds from other foods and using correctly labelled airtight containers.

2. FOOD HYGIENE

Food hygiene has traditionally focused on keeping catering areas clean and avoiding unsanitary conditions. However, even in clean galleys, poor food handling can pose serious risks. Good hygiene goes beyond cleanliness—it involves protecting food from harmful contamination by bacteria, chemicals, or foreign objects at every stage, from delivery to consumption.

Bacterial contamination is the leading cause of food poisoning, but physical and chemical contamination, such as from jewellery, loose items, or cleaning products, can also occur. Sourcing safe food is equally important, as some food remains unsafe no matter the precautions taken.

Bacteria thrive in warm, moist environments—especially on high-protein foods. In contrast, foods high in sugar, salt, or preservatives are less prone to bacterial growth.

"High-risk" foods — those most often linked to food poisoning—are ready-to-eat items that support bacterial growth, including:

- Cooked meat, poultry, and rice
- Meat-based products like gravy and stock
- Milk, cream, eggs, and egg-based dishes
- Shellfish and other seafood

Raw meat, while a source of bacteria, is not considered "high-risk" because it is typically cooked before eating. People often carry harmful bacteria, especially on their hands, which makes proper hygiene essential. Other common sources include pests like insects, flies, rodents, as well as dust and leftover food.

Contaminated food usually looks, smells, and tastes normal unless spoilage is severe. In warm conditions, bacteria multiply quickly on both high-risk foods and raw meat. Most contamination results from carelessness, lack of knowledge, cutting corners, or improper handling and storage.

2.1. Main Reasons for Food Poisoning

1. Preparation of food too far in advance and stored at room temperature.
2. Cooling food too slowly before refrigeration.
3. Not reheating food to high enough temperatures to destroy harmful bacteria
4. Using contaminated food.
5. Undercooking.
6. Not thawing frozen food for a sufficient time.
7. Cross-contamination from raw food to cooked food.

8. Storing hot food below 63˚C.
9. Infected food handlers.
10. Improper use of leftovers.

2.2. Prevention of Bacterial Food Poisoning

Food must be protected against contamination. High standards of personal cleanliness and food safety must be observed. Any existing bacteria already in food must be prevented from growing to dangerous levels. Most bacteria can be destroyed by thorough cooking, but not pre-formed toxins. To reduce the risk of food poisoning, a range of control measures should be placed covering:

- Personal hygiene
- Temperature control (keep food hot >63˚C or cold <5˚C)
- Segregation of raw and cooked foods
- Ensuring no risk of cross-contamination via hands, cloths, cutting boards, etc
- Thorough cooking
- Adequate and proper cleaning
- Purchasing safe supplies and ensuring safe delivery
- Some coral fish and raw, freshly caught fish can contain toxins

2.3. Personal Hygiene

Food handlers must maintain high personal hygiene standards—stay clean, tidy, and wear light-coloured protective clothing.

Catering staff should have access to handwashing stations with soap and hand-drying facilities. Disposable towels or hot air dryers are preferred over shared towels. Hands must be washed regularly—on entering the galley, before handling food or equipment, after smoking, touching the face or dirty clothing, using the toilet, and between handling raw and cooked food.

Toilets with washbasins should be near but separate from the galley, with clear handwashing signs displayed. Direct hand contact with food should be minimised by using tools like tongs. Gloves may be used, but should not replace good hygiene.

All cuts, sores, or spots must be fully covered with coloured waterproof dressings.

2.4. Fitness to Work

Anyone working with food with food poisoning symptoms, for example diarrhoea and vomiting or suspected of carrying food poisoning organisms because of close contact with a confirmed case, should be immediately excluded from any job which might expose food/water to the risk of

contamination. If a food handler has suffered sickness and diarrhoea, they should not handle food for at least 48 hours after the symptoms have ceased. Several other conditions require infected persons to be similarly excluded for varying lengths of time according to medical advice. Secondary infections associated with boils and septic cuts, respiratory infections from heavy colds, may also require the suspension of food handlers until successfully treated.

2.5. Preparation and Cooking

Raw meat and chicken-like meat should be defrosted in controlled, cool, and clean areas—never at room temperature, especially in a warm galley. Keep food covered and placed on a rack inside a container to prevent contact with defrosting liquid. Use a food handling room in cold stores if available. Always ensure meat is fully defrosted before cooking.

2.6. Service

Ideally, food should be consumed as soon as it is prepared/cooked, but work patterns and other unplanned factors can delay meal times. If there are significant delays, cold cuts can be stored in the fridge or chilled display unit until the crew and guests are ready to eat. Hot food can be safely left in the pot over a very low heat so long as it is regularly stirred to maintain a safe temperature of 63˚C, or it can be stored in a hot press.

2.7. Leftovers

Great care should be taken when preparing large quantities of food that may result in a lot of leftovers. Meals should not be cooked in advance unless there are special circumstances, such as a forecast of bad weather conditions.

Cooling of high-risk food must be done quickly to avoid potential health risks. Small amounts of food should cool relatively quickly, but the process can be sped up if necessary. For example:

- If available, use a fridge with a lower room temperature.
- Pour liquids into shallow pans and stir frequently.
- Split food into relatively small pieces or batches.
- Use an iced water bath

Once cold, leftovers must be date marked and be suitably stored in a fridge and used within **2 days,** preferably served cold, for example as part of a salad. If reheating is absolutely necessary, food should be rapidly and thoroughly reheated, but only once. Reheated leftovers must have a core temperature of **75˚C**.

2.8. Stores

Ships should have adequate storage facilities for all stores. If storage spaces are limited, stock levels should be maintained by taking on smaller volumes of stores more frequently. All stock should be rotated as and when necessary.

Cold Stores

Safe temperatures for cold stores are to be 5˚C or colder and minus 18˚C or colder for chill and freezer cabinets respectively but a slight tolerance of one or two degrees is unlikely to create any significant risk to food safety. If cabinets do not have a means of checking temperature, a suitable thermometer should be provided. Temperature should be controlled twice a day and noted in a temperature log book that should be kept for at least a month.

Dry Food Stores

Dry food stores should be dry, cool (where possible around 10˚C), well lit and ventilated. There should be adequate shelving and pallets to avoid stowage directly onto the deck. Care should be taken to ensure stock is used in strict date rotation and that supplies have the best possible durability date. Perishable provisions should neither be ordered nor accepted in quantities greater than can be consumed before the expiry date. Daily checks should be made on short-life perishable food such as fresh fruit and vegetables.

2.9. Cleaning

To prevent the build-up of dirt and waste, a **"clean as you go"** policy should be followed.

All items that come into contact with food—such as trays, knives, cutting boards, machinery, and worktops—must be thoroughly cleaned and disinfected. Mechanical dishwashers disinfect through high rinse temperatures (around 82˚C). Hand-washed items should air dry and be stored immediately once dry, without using drying cloths.

Clothes and towels can harbour bacteria and must be washed regularly or discarded. Mops and waste bins should also be cleaned routinely and stored in designated areas.

Galley areas must be cleaned daily. Time should be allocated for a regular, thorough clean of all areas, including cupboards, storerooms, decks, bulkheads, extractor fans, and canopies. Grease build-up in ventilation ducts is a fire hazard and must be cleaned regularly. Cleaning frequency should be based on a risk assessment.

During cleaning, food and equipment must be protected. Cleaning agents and tools should be securely stored, preferably in a designated locker. Waste and food scraps must be separated and disposed of according to the ship's garbage management plan. Note: bin lids can increase the risk of cross-contamination and should be managed accordingly.

2.10. Pests and insects

Good housekeeping minimises the risk of infestation, and it is important to ensure that areas, particularly refuse areas, are kept in a clean and tidy condition. Waste bins should be emptied regularly, and lids should always be fitted unless they are being used. They should also be washed after emptying. Flies, cockroaches and rodents present a serious risk hazard. Food suspected of being contaminated by rodents, flies, or cockroaches must be destroyed.

3. FRESH WATER

Fresh water obtained from shore supply or water barge should be transferred by a designated freshwater hose. Hoses should be durable, with a smooth, impervious lining, and equipped with fittings, including adapters, to permit connection to the shore potable water hydrants and filling connections to prevent their use for loading other liquids.

Fresh water hoses should be:

- clearly marked (generally coloured blue),
- stowed in a locker clear of the deck,
- drained and capped at both ends after use,
- flushed through and discharged to waste before loading.

3.1. Disinfection systems

There should be no facility for by-passing primary automatic disinfection systems. Automatic disinfection systems should have a fail safe control arrangement with an audible/visual automatic alarm to prevent the passage of water in the event of any malfunction.

Chlorination:
It is generally accepted that chlorine is a disinfectant which requires around 20 minutes of contact time to react. It can be the case that shore mains water only contains low concentrations of free chlorine, which may be further decreased within the ship environment. It is also considered good practice to add chlorine as a routine when loading fresh water to a level that produces 0.2mg/L (ppm) residual free chlorine or 1.0mg/L (ppm) chloramine when chloraminated water is supplied. A commercial test kit should be used to check the free chlorine or chloramine levels.

Silver-coated Filter Candles:
These filters retain suspended matter, and they have a bacterial effect. Treatment is instantaneous without any addition of chemicals.

Electro-silver Ionisation:
Electro-silver ionisation may be used for the automatic disinfection of fresh water produced on board ships. Units should be set up by the manufacturer to ensure a minimum concentration of 0.1 ppm to be added to the water under maximum flow conditions. The minimum time required for the silver to take effect is 4 hours after passing through the unit. This should ensure a maximum of 0.08 ppm in the system.

Ultra-Violet Sterilisation:
Although the sterilisation process is instantaneous, ultra-violet steriliser units have no dispersal or residual properties. For this reason, treatment is generally used only as a supplementary system, fitted downstream of the water tank or supply pump. UV units may, however, be effective in certain cases where service lines are relatively short. They should be installed so that the direction of flow is vertical to keep the deposits in the tubes to a minimum. The water should be continuously circulated in the system through the UV unit. There should be a means to measure the intensity of UV radiation, and a switch-off mechanism with an alarm should be fitted in the event of UV radiation being too weak. The performance of the tubes should be regularly monitored.

3.2. Fresh Water from Water Making Plant

Sea water used for treatment on ships should be collected from areas free of pollution, including air pollution. A minimum distance of 20 miles from land is generally considered safe, though more may be required in some cases. Water production using a water-maker must **never** occur in ports, near ports, or when anchored close to other vessels.

The manufacturer's operating instructions must be clearly displayed in the plant room and followed precisely.

Bypasses should only be installed around treatment units if essential to the treatment process. A stock of spare parts—especially for critical or fragile components—must be maintained.

Distillation units should:

- Display low-range salinity and operational temperature levels
- Have an automatic discharge to waste
- Include alarms with trip settings or equivalent safety features

Chemicals used in injection systems to prevent biofouling in seawater intakes must be appropriate for this purpose.

Reverse osmosis plants (water-makers) are highly effective in removing microorganisms and chemical contaminants. They may be used as a standalone treatment if effective, or combined with low-level chlorine or an equivalent disinfectant.

3.3. Potable Water Storage Tanks

Storage of potable water should normally never be less than a 2-day supply. Consideration should be given to the size of the ship's complement of guests and crew, the time and distance between ports of call and the availability of water suitable for treatment with facilities aboard. Storage may be decreased if the water supply can be supplemented by water produced by water-making plants, but only to the amount that can be reliably supplied by the water-making plant.

Coating systems in tanks should be specially developed for use in potable water tanks. Manufacturer's recommendations for application and drying or curing of the coating must be followed. All items that penetrate the tank, for example bolts, pipes, pipe flanges should be coated with the same product. Corrosion and scale inhibitors if used should be suitable for use in fresh water systems.

3.4. Taps and Other Fixtures

Fixtures should be resistant to the corrosive effects of salt water and saline atmosphere and fit for use with fresh water systems. They should be easy to clean and so designed to function easily and efficiently. Approved mixer taps should be fitted to showers and it is recommended that wash-hand basins should have hot and cold mixer taps.

3.5. Health and Safety

Adequate care should be taken when handling chemicals or biological agents, such as Chlorine. Suitable risk assessments and control measures should be applied.

3.6. Maintenance plan

Action	Intervals
Fresh water tanks to be thoroughly pumped out and, where necessary, hosed before refilling.	6 monthly
Fresh water tanks to be opened up, emptied, ventilated and inspected thoroughly cleaned, recoated as necessary, aired and refilled with clean freshwater, chlorinated to a concentration of 0.2 ppm free chlorine. The cleaning process should include disinfection with a solution of 50 ppm chlorine.	12 monthly
The system (from machinery space to furthest outlets should be charged with super-chlorinated freshwater at a concentration of 50ppm for 12 hours, then completely flushed out and refilled at 0.2ppm residual free chlorine.	Before the season or a maximum of 12 months.
Pressure tests on all FW tanks. After the pressure test, the system is thoroughly flushed with potable water.	Intervals not greater than 5 years.
A fresh water full analysis service for compliance with MLC2006 regulations and the ship's sanitation certificate.	6 monthly and before the Ship Sanitation Certificate.
Calorifiers to be opened up, inspected, scaled and cleaned. Before draining, temperatures should be raised to 70˚C for at least an hour to ensure destruction of bacteria which may have colonised the lower and cooler zone of the unit.	Annually or less if required
Shower heads are to be dismounted and hyper-chlorinated.	3 monthly
FW Hoses flushed and fill with 50 ppm chlorine solution and allow to stand for at least an hour before emptying and stowage.	6 monthly or more frequent if required.

*These maintenances **must** be part of the vessel PMS*

VERSION HISTORY

Version	Date	Editor	Revision History
1.0	21 Ap 2025	Christophe Guegan	Initial Commit
2.0	10 Jan 2026	Christophe Guegan	New Design