



PANAMA MARITIME AUTHORITY
DEPARTMENT OF SEAFARERS
INSTRUCTIONS FOR HANDLING, STORAGE AND PREPARATION OF FOOD
Under the Maritime Labour Convention, 2006 (Rule 3.2 Rule 3.2)

OBJECTIVE

Provide instruction to all catering staff, which should be properly instructed in the areas related to food and personal hygiene, as well as handling and storage of food on board ship, ensuring that seafarers have good quality food and clean drinking water provided under regulated hygienic conditions.

DISEASES TRANSMITTED FOR FOOD

Diseases that can be transmitted by foods include, but are not limited to the following: Typhoid (*Salmonella typhi*), shigellosis (*Shigella* bacteria), cholera (*Vibrio* spp bacteria), intestinal disease (*Escherichia coli* O157: H7) and liver disease (hepatitis A virus).

CATERING PERSONAL SERVICE

The staff in charge of catering on board a vessel must be free of any communicable diseases.

The staff in charge of the kitchen area, shall comply with the relevant qualifications as well as present a food handler card issued by the Authority for the seaman.

Seafarers with diagnosis, suspected or exposure to any communicable disease should be restricted to work in any area or operations related to food, equipment, utensils, linens, single-use articles and cleaned and disinfected until they are symptom free for a minimum of 48 hours.

Must be reported to any master or staff, as appropriate, all food handlers that present the following symptoms or illnesses:

1. Boils, sores, infected wounds, diarrhea, jaundice, fever, vomiting, sore throat with fever, or discharge from the ears, eyes, nose or mouth.
2. Persistent sneezing, coughing or runny nose that causes discharges from the eyes, nose or mouth.

No one should be penalized for reporting sick food handlers or symptoms.

In addition, cuts, spots or sores should be completely covered with waterproof dressings.

HYGIENE

MINIMUM RULES FOR PERSONAL HYGIENE SERVICE FONDA

1. Bathing daily before starting their work.



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2. Keep hair and mouth covered. All food handlers must wear hair restraint equipment (e.g., nets, caps, gloves, disposable mask or towel, apron, footwear and protective clothing) to prevent the hair from coming into contact with foodstuffs, equipment and in other food service areas.
3. Introduce clean clothes and shoes.
4. No use watches, rings, earrings, bracelets or any jewelry.
5. Appear with clean nails, well trimmed and unpainted or unpolished.
6. Refrain from coughing, sneezing or talking over the food.
7. Do not smoke, eat, chew gum or drink in the area or during food preparation.
8. Avoid touching hair, face, ears or any part of the body while handling food.
9. Undergo regular medical supervision.
10. Suspend work in situations of illness and wounds present on the hands or arms.

HAND WASHING TECHNIQUES

1. Moisten with clean hands and forearms up to the elbow.
2. Lather up with a good amount of soap's lather in the direction of the hand to the elbow.
3. Clean under fingernails using a brush or wiping each one.
4. Rub the hands, fingers and forearms lathered for 20 seconds.
5. Rinse hands thoroughly in running water toward the elbow.
6. Dry hands with a clean towel.

NOTE: *These techniques must be repeated at all times and especially:*

After:

1. *Touching hair, face, ears or any part of the body.*
2. *Use the bathroom.*
3. *Coughing, sneezing or blowing your nose with your hands.*
4. *Touching or picking something up.*
5. *Touching trash, cleaning tool or dirty surfaces.*

Before:

1. *Start preparing or handling food.*
2. *Eating or feeding.*

ENVIRONMENTAL HEALTH

FOOD PREPARATION AREA

The place where food is prepared must be:

1. Located far from stagnant water, landfills, latrines or any source of contamination.
2. In the best possible conditions to facilitate cleaning operations.
3. With ceiling, walls and smooth floors clean and free of holes.
4. You should clean the area surrounding anything that allows animal housing.



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5. Avoid over to the staging area the outsiders animals and insects.
6. Use insecticides where pests are detected.

CLEANING EQUIPMENT AND UTENSILS

The cleaning process to be followed is:

1. Wash Thoroughly all equipment, utensils and work tables that were used after every meal.
2. Use soap or detergent, sponge and clean water to wash the material and equipment.
3. Remove perfectly good food debris from surfaces.
4. Rinse with clean water and let dry in colanders or using a clean towel or absorbent material preferably disposable.
5. To protect food security and have a proper cleaning process of food, utensils and equipment, food handling area must have an adequate supply of hot and cold water at all times.
6. After performing cleaning, disinfection may be required. The chemicals used for disinfection should be stored in clearly labeled containers, away from food handling areas, unless otherwise specified by the manufacturer.

WASTE DISPOSAL

1. It is necessary to provide storage and safe disposal for waste, to prevent disease organisms and pests in food handling operations.
2. The garbage disposal should be carried out as permitted in accordance with Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL - Regulations for the Prevention of Pollution by Garbage from Ships) and guidelines as set International Maritime Organization.

FOOD SUPPLY AND STORAGE

RECEPTION AND SUPPLIES

The pantries of the ships must be supplied by safe and available food, as well as good quality drinking water, nutrition, hygienic conditions and appropriate amounts that adequately cover the needs of the vessel; selecting food suppliers who can demonstrated adequate control over their food and adequate transportation to the ship.

Food should be clean, sound, free of deterioration and adulteration and safe for human consumption.

The first step in food processing is the receipt of the same, which by a quick but thorough inspection should ensure that the characteristics of color, smell, taste, texture and appearance are appropriate for each type of food. It is also necessary to observe the terms of packaging, the expiration date and any visible contamination vermin as insect trails or excreta.



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Annex 1 contains a table with the basic features must meet the food to be accepted, and Annex 2 are the characteristics that help identify products in poor condition and should therefore be rejected.

FOOD STORAGE

The general considerations to be taken into account for the place to be stored foods are:

1. A closed, dry and ventilated, with a door accessible to vehicles discharge and away from all pollution and landfills tape and backwaters.
2. The walls and floors should be easy to clean and in good condition.
3. Food should be accommodated on a first come, following the criteria FIFO (first in, first out) taking into account the expiration date.
4. Containers and packaging in which food is stored must be clean, sealed and in good condition.
5. Accommodate food pallets or shelves to avoid the contact of the product with floors and walls.
6. Food should not be stored at the floor, including the floor of the kitchen and the room cooling and freezing. The storage of food should be at least 15cm (6 inches) above the deck.

STORAGE OF FRESH FOOD

Most fresh foods such as meats, dairy products, fruits and vegetables cannot be maintained for more than 1 or 2 days at room temperature, so it is suggested:

1. Store fruits and vegetables in cool, clean and dark to prevent early aging.
2. Keep out of contact with the floor, dust and insects.
3. Save it clean and covered.
4. Wrap and separate those that have strong odors.
5. In the case of having a cooler, will be stored in cold, allowing preserve food for a period of greater time at room temperature, especially in warm climates. Besides the advantage of cooling and freezing technique for decrease the growth of microorganisms and the production of toxins which are responsible for sick people, there are some bacteria that are able to kill not withstand the low temperatures of freezing.

Refer to Annex 3 to identify the temperatures considered risk area for food.

RECOMMENDATIONS FOR COLD FOOD STORAGE

1. Fruits and vegetables should be stored in clean place, at a temperature between 7° and 12° C.



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2. The sliced or chopped fruit, should be stored in closed containers be placed in the refrigerator, unless used for immediate consumption.
3. The cut vegetables (e.g., sticks, celery, carrot, potatoes and tofu cut) can be immersed in ice or water from potable water sources, but should be stored in the refrigerator until consumption.
4. Recommended refrigerated dairy products at a temperature of 7 ° C or less to reduce the multiplication of microorganisms.
5. The meat must be cooled to a temperature at or below 7 ° C or frozen to minus 18 ° C.
6. All stored food should be covered or protected.
7. Raw foods are stored in the bottom and cooked on top to avoid being contaminated by runoff from the raw.
8. Keep the refrigerator temperature to 4.4 ° C (40 ° F) or below and the freezer temperature to -17.7 ° C (0 ° F) or below.
9. Raw meat, poultry meat and seafood should be stored in a covered container with a drip tray when being cooled to prevent cross contamination caused by fluid drainage.
10. Inspect fresh supplies every day.
11. Ripe fruits and vegetables should be used as soon as possible.
12. Ripe fruits and vegetables should be used as soon as possible.
13. Perishable products such as milk, cheese and other must be visible due date.
14. Products discolored, poorly shaped or states, or of questionable quality, including those with odors, should be removed immediately.

DRY FOOD PRODUCT

1. All powdered foods, canned beans should be stored on shelves, cabinets or on pallets that are in dry, clean and well ventilated.
2. The food grains and powder should be stored in their original containers or in glass or plastic bottles tightly closed and labeled.
3. Canned goods were stacked on shelves or pallets be careful not too high to prevent breakage or crushing.
4. Storing canned goods, should be in a cool, clean and dry (if possible about 10 ° C (50 ° F).
5. Inspect canned goods monthly. If you are past the expiration date, dispose of them for disposal. It should be available for disposal packaging products with dented, leaking, bulging or rusted cans.
6. Unused portions of canned products should never be re-stored in their original containers. They should be placed in suitable, closed and stored in the freezer or refrigerator, as appropriate.

STORAGE OF CHEMICALS AND CLEANING

All cleaning chemicals and insecticides, rodenticides, thinner or gasoline, should be stored in a different place of food and be covered, labeled and clearly identified in their original containers.



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FOOD PREPARATION

DEFROSTING

1. Never defrost raw meat, poultry or seafood at room temperature. Only should be defrosted in the refrigerator. They should be placed separately in a drip pan so they are not resting on the thawed liquid and should be stored in a covered container, separated from these and below other foods in the refrigerator that may be exposed to the risk of contamination.
2. To speed up the defrosting of foods should be placed in a plastic bag sealed, immersed in cold tap water and change the water every 30 minutes. Alternatively, you can use the microwave to defrost food.
3. Meat, poultry and seafood should be completely defrosted before cooking and cooked immediately after thawing.
4. Never refreeze defrosted food.

CONTAMINATION

1. Always separate raw and cooked foods, meats, poultry, fish and their juices away from other foods during preparation and storage.
2. When marinating meat, poultry or fish, do it in a covered container in the refrigerator.
3. Use different cutting boards (color coded to help keep them separate) and utensils for raw foods of animal origin (e.g., meat, poultry, seafood, eggs, and foods containing).
4. After cutting raw animal foods, wash cutting board, utensils and countertops with hot, soapy water or disinfectant (for example, 1 tablespoon of liquid chlorine bleach per 1 gallon of water).
5. Maintaining separate fruits and vegetables, these are ready for consumption, until wash.
6. Fruits and vegetables should be washed thoroughly with water to remove dirt and other contaminants before being cut, combined with other ingredients, cooked, served, or offered for human consumption.
7. Spices protect products from contamination, having the same, in dispensers designed to provide protection or by using individual packages.
8. Being aware of the dangers (urticaria, anaphylactic shock, and death) associated with food allergies and cross-contamination as food can provoke.
9. Always use clean utensils when serving to avoid serving utensils that is in contact with a dirty plate and subsequently contaminate other dishes.
10. Food handlers should avoid direct hand contact with food by using suitable tools (egg tissue, spatulas, tweezers and single-use gloves, etc...)
11. Food handlers should not use the tools more than once to taste food that is served.
12. Seawater should not be used in the preparation of food or near food preparation areas.
13. All food suspected of being contaminated by flies, cockroaches, rodents or other pests should be destroyed.



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TEMPERATURE CONTROL

1. The danger zone for food contamination is between 4 ° C (40 ° F) and 62.8 ° C (146 ° F). In general, perishable foods should not exceed the time required in these temperatures and in no case should move away food in this temperature range more than 2 hours, or when the temperature exceeds 32 ° C (90 ° F), more than 1 hour. In addition, food should be placed in a suitable, covered when inside of that temperature range, unless they are being prepared or served.
2. Overall:
 - a. Keep hot foods above 62.8 ° C (145 ° F).
 - b. Keep cold foods below 4.4 ° C (40 ° F).
 - c. Keeping food frozen below -12 ° C (10 ° F).
 - d. Reheat only 1 hour at an internal temperature of 75 ° C (167 ° F).
3. Cook raw foods of animal origin (eggs, fish, meat, poultry and foods containing them) to the following minimum internal temperatures to destroy bacterias:
 - a. Fillets of beef, veal and lamb steaks, roasts and chops: 62.8 ° C (145 ° F).
 - b. Ground beef, veal, lamb and all cuts of pork: 71.1 ° C (160 ° F).
 - c. Turkey or Chicken: 74 ° C (165 ° F).
 - d. Birds: 77 ° C (170 ° F) for breasts, 82 ° C (180 ° F) for whole poultry and thighs.
 - e. Seafood: 63 ° C (145 ° F) for ground or flaked fish, 68 ° C (155 ° F) and 74 ° C (165 ° F) for stuffed fish.
 - f. Eggs: until the yolk solidifies (about 70 ° C (158 ° F)) or 71 ° C (160 ° F) when used in a recipe with other food.

Make use of a thermometer to determine the temperature and check the fluid transfer of meat products, which is specified as Annex 1.

4. To destroy the parasites in the raw or partially cooked fish and other seafood, keep freezing in a temperature range of -20 ° C (-4 ° F) or below for 168 hours (7 days) in a freezer, or -35 ° C (-31 ° F) or below for 15 hours in a blast freezer .. Certain fish in the family of the tunas may be excluded from this process of freezing, as they may be related to fisheries (e.g., food, Gravlox, ceviche, fish or sashimi carpaccio) prepared in food processing plants that have been certified free of parasites.

LEFTOVERS / REHEATING

The clash of food too slowly before refrigeration is a major factor in food poisoning. Although small amounts of food can be cooled relatively quickly, the process should be expedited when this is not the case. Once cold, leftovers should be updated appropriately marking it has been re-stored in the refrigerator and shall be used within the 2 follow days. If not use cold, which is better, the food should be reheated quickly, as provided in section 2.3.2.



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APPENDIX 1

CHARACTERISTICS OF ACCEPTANCE FOR FOOD

<i>Product</i>	<i>Color</i>	<i>Odor</i>	<i>Texture</i>	<i>Appearance</i>
Beef	Bright Red	Cool	Elastic And Soft	Firm
Pork	Pale Pink	Cool	Elastic And Soft	Firm
Poultry	Pale Pink	Neither Bitter Nor Strong	Elastic And Soft	Firm
Fish	Red Gills And Bright, Bright Eyes And Transparent	Characteristic	Elastic And Soft	Firm
Fruits	Bright	Cool	Firm	It should not be damaged with bruises, pile torn, chipping or staining
Vegetables	Bright	Cool	Firm	Avoid bruises, scratches, insects or other defects

APPENDIX 2

FEATURES TO IDENTIFY BAD FOOD

Fresh Food	Dried and Packaged Foods	Canned Food
Unpleasant Smell	Packaging Broken	Rusty cans or Diced
Strange Taste	Food Spilled	Different content to what the label samples
Areas bruised or beaten	Damaged Packaging	Expired expiration date
With the presence of mold	Wet or presence of mold	Leaks in the can
Signs of deterioration by insects or rodents	Gaskets dirty or contaminated with substances	Smell, taste and look different from the usual
The Appearance very mature	Content marked differently than the label	Presence of insect or rodent feces in cans or its packaging



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APPENDIX 3

TEMPERATURES OF RISK FOR FOOD

212°F	Boil Water	100°C
180°F	Poultry (whole, legs, thighs and wings)	83°C
170°F	Poultry Breast of	77°C
165°F	Milled poultry, stuffing, casseroles and reheating leftovers	74°C
160°F	Ground Meat (Beef, Lamb, Veal, Pork and egg dishes)	72°C
145°F	Beef, Lamb, Beef fillets and roasts.	63°C
140°F	Fully cooked ham Food Safety Zone Hot	60°C
	DANGER ZONE Do not keep food between these temperatures	
40°F	Refrigerator Temperature	4,5°C
32°F	Food Safety Zone Cold	0°C
0°F	Temperature Freezer	-18°C