Restaurants
Hotel
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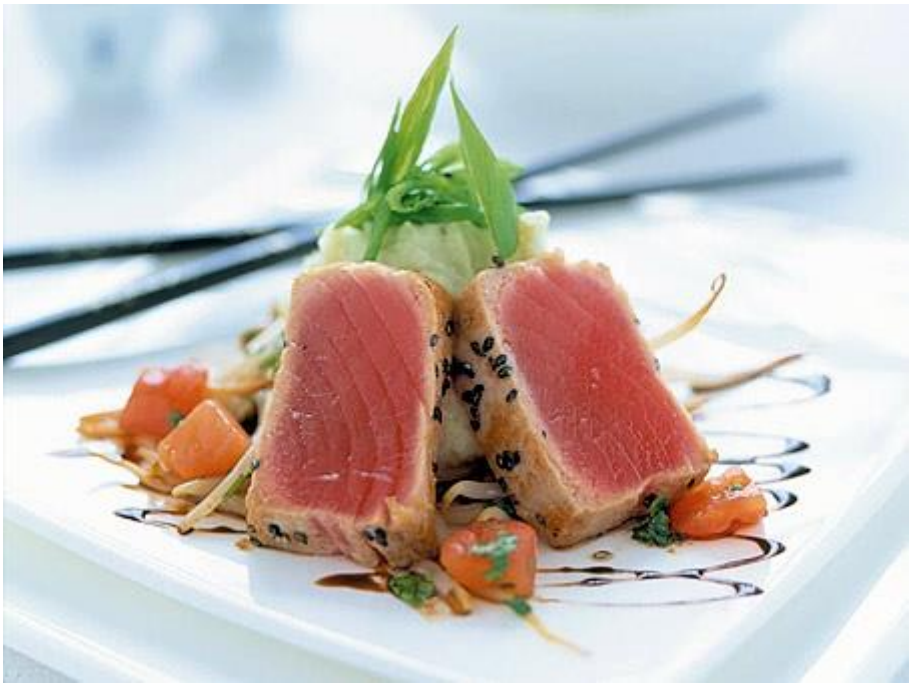
Catering



GLOBAL FOOD SAFETY STANDARD
DIVISION RESTAURANTS

Version 9, Februar 2021

Food Safety Policy

The DO & CO Restaurants, Lounges and Staff Restaurants allow us to provide a unique quality product for our guests.

Top quality in all products and service areas is one value that primarily characterises the DO & CO brand. Out of a sense of responsibility for its customers and for society, DO & CO also sets the highest quality standards in all kitchens. We consider it a solemn duty to comply consistently with the strictest hygiene regulations.

Food prepared in DO & CO Restaurants, Lounges and Staff Restaurants must be safe. This is legal requirement as well as the basic expectancy of our customers. Unsafe food production is not only a risk for our guests and customers but also harmful for our company.

The DO & CO Food Safety Standard is an effective food safety tool applicable to all DO & CO Restaurants and Lounges. Safe Food preparation and service in DO & CO Restaurants, Lounges and Staff Restaurants is based on how successful we comply with the rules and regulations explained in this standard. Where food is made in a restaurant for another division, i.e. event catering preparation, these meals shall comply with the DO & CO Restaurant Food Safety Standard.

The DO & CO Food Safety Standard is based on:

- The principles of the Hazard Analysis Critical Control Point (HACCP) approach to food safety and Good Hygiene Practice (852/2004).
- Where possible and expedient legal requirements were included. i.e. the European Food Act (Regulation (EG) No 178/2002) and FDA Guideline Documents.

The DO & CO Food Safety Information and Training program ensures that all DO & CO staff receives all information relevant to health, hygiene and food safety.

With the implementation of this internal regulation, DO & CO provides guests safe food with best quality and highest compliance to guest’s requirements.

Attila Dogudan

(Chairman of the Management Board)

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Introduction

“DO & CO Global Food Safety Standard – Restaurant Division” is based on HACCP concept according to the 7 principles of Codex Alimentarius CAC/RCP 1-1969, Rev. 4-2003. In such a system all hazards during food flow are identified and are controlled at defined CCP’s (Critical Control Points) and SOPs (Standard Operation Procedure).

After carrying out the HACCP risk assessment it is understood that within GMP no CCPs are defined. In this standard, the control of all relevant hazards through defined SOPs is explained. Safe food preparation and service in restaurants and lounges can only be achieved by careful control of hazards through SOPs. Control is understood through monitoring and then taking corrective actions when the controls indicate any deviation.

A HACCP based food safety system requires recording and documentation. Such records and documentation inform us about the performance of the system implementation as well as requested by legal departments and also customers.

Biological hazards are the most important ones effecting restaurant and lounge food production systems. Therefore, although the system includes control of all foods, the target food group is the ready-to-eat high risk foods.

DO & CO Restaurants, Lounges and Staff Restaurants Standard state the Food Safety rules and regulations to be applied in all DO & CO kitchens. However, at any point where national regulations are stricter than what is stated in the standard, the national rules are valid.

1. Scope

This standard covers all food safety related issues which exist in a Restaurant, Staff Restaurant and Lounge operation.

Restaurants and lounges can be identified as all DO & CO restaurants, airline lounges, Staff Restaurants and event or airline catering production taking place within the restaurant or lounge kitchen.

This standard does not cover specialist operations such as ice cream production within Demel.

2. Hazard Analysis and Risk Assessment

Hazard analysis and risk assessment was done at each step of food flow (see appendix).

Once the hazard's are identified for each process step, determination of whether the hazard is significant or not should occur through the evaluation of each hazard severity and likelihood of occurrence.

As working within GMP no CCPs are defined. SOP (Standard Operation Procedures) includes a variety of preventive food safety procedures.

3. Production Process – Standard Operation Procedures (SOP)

SOP 1 Hazardous Meal Ingredient Control

Purpose

The aim of meal ingredient control procedures is to prevent the use of hazardous meal ingredients which may constitute a microbiological or chemical hazard.

Scope

Control of hazardous meal ingredients

Procedure

The following list contains items that by nature may constitute a food safety risk and may have been previously implicated in foodborne illness outbreaks. Therefore, it is recommended that these items not be included in service.

Products which have to be avoided or products which need special attention/measures are listed below.

Meal Component	**Hazard**	**Action**
Raw / undercooked poultry	*Salmonella, Campylobacter*	Heating – do not serve undercooked poultry
Raw / undercooked eggs	*Salmonella, Campylobacter*	Heating (Exception: poached eggs, fried egg) Use only fresh eggs from a known source.
Raw / undercooked meat (except whole muscle beef and lamb)	*E.coli O157* (EHEC), *Salmonella*, parasites	Check meat quality - Only use high quality products only from approved supplier
Raw fish and shellfish	*Vibrio parahaemolyticus*, parasites	Check fish quality - Only use fresh high quality products (only sushi quality) from approved supplier, do not interrupt cooling chain (not more than 2°C or on ice)
Fresh shellfish	*Vibrio parahaemolyticus*, parasites	Serve products only during cold season
Unpasteurised milk and cream	*Salmonella, Staph. aureus*	Heating – do not serve unpasteurised products
Soft cheeses from raw milk	*Salmonella, Staph. Aureus, Listeria*	Use only certified products from approved suppliers, supplier to provide a certificate of analysis for each batch
Raw vegetable sprouts	*Salmonella, Listeria*	Clean carefully, disinfect with acids (Immunell, citrus, vinegar, …), rinsing
Raw / undercooked dried beans	Lectins	Do not serve undercooked dried beans
Raw desiccated coconut	*Salmonella*	Use only certified products from approved suppliers

Responsible: Food Development **Corporate:** Quality Assurance

SOP 2 Control of Allergy-related Meals

Purpose

Consumers who are allergic or intolerant to specific substances in specific foods may ask for the composition of the meals. These substances are generally referred to as food allergens. When such a request received it must be ensured that the service and the chefs are aware of possible allergens in each meal. Therefore, a list with allergens in each meal will be available.

Scope

Control of allergens in meals

Definitions

An allergen is a substance in our environment (e.g. food ingredients, food additives) which by contact may trigger an adverse response by the human immune system. Food intolerance or food sensitivity is a negative reaction to a food. It can be caused by the absence of specific chemicals or enzymes needed to digest a food substance, or to the body's responses to certain food constituents (chemicals) both natural or artificial. Both are listed in the European Food Law as below:

Allergens and products thereof:

- Cereals containing Gluten (Wheat, rye, barley oats, spelt, kamut or their hybrids strains)
- Crustaceans
- Eggs
- Fish
- Peanuts
- Soybean
- Milk (including Lactose)
- Nuts i.e. Almond, Hazelnut, Walnut, Cashew, Pecan nut, Brazil nut, Pistachio nut, Macadamia Nut, Queensland nut
- Celery
- Mustard
- Sesame seeds
- Sulphur dioxide and sulphites at concentrations of more than 10mg/kg or 10mg/kg expressed in SO_2
- Lupin
- Molluscs

Procedure

The above 14 agents are the target group of SOP 2 Procedure for Control of Allergy-related Meals.

On site produced / assembled allergy-related Meals
Preventive measures:

Information of ingredients, additives and allergens has to be available.

The customer needs to be informed that there might be the possibility of having other allergens in their meal because separation during cooking is not 100% possible.

Responsible:	Quality Assurance	**Corporate:**	Purchaser Production

SOP 3 Food Supplier Approval

Purpose

To ensure safety of purchased foods by use of procedures which satisfy customer expectations as well as relevant food legislation.

Scope

This procedure applies to approval of all suppliers

Procedure

Approval may be performed by:

- An on-site audit, which includes a system audit as well as a physical inspection of premises (recommended for suppliers of high risk products).
- A system audit (Assessment of supplier's food safety control, based on supplier's description and documentation. A questionnaire or survey is used for this purpose. Certificates of accreditation issued by a recognized governmental, regularity or industry organization can also be considered for approval).

On site audits are recommended for potential suppliers of ready-to-eat high risk foods.

System audits are suitable for approval of suppliers of low risk foods.

Frequency of on site and system audit shall be based on the relative risk of the product and the relative risk of the supplier.

Audit results from other Divisions (Airlinecatering and IEC) can be used for supplier approval.

Based on site and system audits suppliers shall be specified as;

- Approved
- Conditionally approved
- Non-approved

Conditionally approved suppliers shall be re-audited within a reasonable time for final clarification of approval status.

- Each DO & CO unit shall establish and maintain a list of local suppliers of high-risk ready-to-eat foods with indication of approval status as well as time schedule for approval audits of possible un-approved or conditionally approved suppliers. Units will be audited against this list during DO & CO food safety audits.
- Approval audits are not feasible for wholesalers and distributors. Approval of foods purchased by them shall be done by assessment of product specification.

Product specification besides quality parameters shall include allergen information, microbiological specification, storage conditions and processing condition (such as time-temp. limits for cooking, pasteurization etc), GMO relevant information.

Related Documents:

- Supplier Audit Checklist

- Questionnaire, survey
- Supplier approval status list of high-risk ready-to-eat foods
- Product specification
- GMO Policy

Responsible: Purchaser **Corporate:** Quality Assurance

SOP 4 Receiving Control

Purpose

To ensure that a procedure is applied to verify the safety and quality of the purchased foods at the time of receiving.

Scope

All purchased foods.

Procedure

1. The followings will be verified for each delivery at the time of receiving:

- Temperature of purchased refrigerated food shall be 4°C / 39°F with tolerance of 3°C at receiving. (fish on ice; minced meat or prepared raw meat not more than 4°C / 39°F). Purchased frozen food shall be hard frozen and without signs of previous thawing at receiving. Temperature of hot food shall be according to legal requirements (e.g. Austria min. 70°C / 140°F) at receiving.
- If surface temperature exceeds 7°C / 46°F, check core temperature. If core temperature is less than 7°C / 46°F, accept product and bring quickly under refrigeration. If core temperature exceeds 7°C / 46°F, reject product (For fish on ice; minced meat or prepared raw meat not more than 4°C / 39°F, no additional check).
- Frozen food displaying soft surface should be rejected or be used as unfrozen product within time limits for corresponding chilled product.
- If surface temperature is less than legal requirements (e.g. Austria 70°C / 140°F) monitor core temperature. If core temperature is above 70°C / 140°F accept product and keep above 70°C / 140°F. If core temperature is less than 70°C / 140°F reject product.
- Main criteria such as weight, size, cut, shape, calibre, dressing, colour, consistency and texture, shall be checked on each delivery as appropriate.
- Foods must be in packages. Open foods without packages are not accepted (except vegetable, fruit and bread).
- Packaging material in direct contact with food shall be clean and undamaged at receiving point.
- Tins must not be blown, deformed or exhibit signs of corrosion at receiving point. Defected tins shall be rejected.
- Purchased foods shall not be in wooden cases.
- Purchased packed food shall be labelled with expiry date (sell by, use by, etc.), and preferably also with production (processing/packaging) date. Each item has to be checked. Expired foods shall be rejected. The rejection has to be recorded. If there is no expiry date (e.g. fresh fish) the products have to be labelled with the receiving date.
- Inside and outside of supplier truck shall be clean. Inside Temperature for cooled products not more than 10°C, for frozen products not more than -15°C, for ambient delivery not more than 18°C. If temperatures are higher, check food temperature and follow Checkliste SOP4.
- Food cartons in the truck shall be on pallets.

2. The following will be verified for each delivery for living products (lobster, oyster, crayfish, living shells) at the time of receiving:

Lobster and crayfish

- Lobster and crayfish must be alive at the time of delivery (still moving properly). To check lobsters, one should be picked up from the box to check it moves when disturbed. If it does not move its head should be placed under tepid running water, if the lobster still does not move, it should be rejected.

- The lobster and crayfish has to be placed in the raw fish cooler, if available the lobster should be placed in a basin. If placed in the cooler the boxes with the lobster need vents.

Oysters and Shellfish

- Oysters and living shellfish have to be closed in undamaged packages at the time of delivery.
- No ammonia smell.
- Shell needs to be filled with fluid.
- Shell meat has to be consistent and bold including liquid.

Related Documents

- Checklist SOP4 Receiving Control

Responsible:	Storage Staff	**Corporate:**	Quality Assurance

SOP 5 Food Storage

Purpose

To ensure that food is safe from biological, chemical and physical hazards, cross contamination and not adequate labelling.

- Temperature control of freezers and refrigerators
- Segregation of processed foods from unclean foods and surfaces
- Protecting food items against air borne contamination
- Date marking and rotation of foods.

Scope

Correct storage of raw and ready-to-eat foods in refrigerators, freezers and dry stores.

Procedure

1. Temperature control

Freezer

Critical limit: -18°C / 0°F or colder

If temperature exceeds -15°C / 5°F, check if the surface is hard, if there is sign of thawing on surface, transfer food into another freezer. If food surface is not hard thaw them out and use accordingly. Frequency of monitoring twice a day.

Refrigerator

Critical limit: Storage temperature of refrigerated high-risk foods max. +4°C / 39°F

If refrigeration temperature exceeds significantly* 4°C, check if there is a technical error and check food temperature. If food surface temperature exceeds 7°C / 44,6°F and there is a technical error transfer to another refrigerator (otherwise check if temperature is coming down). If food surface temperature exceeds 10°C / 50°F, discard food. Frequency of monitoring twice a day.

* significant means a deviation of ± 3°C or more

2. Segregation of foods

Segregation Requirements

- Raw food shall be segregated from Ready to Eat Food.
- If stored in the same cooling cell the segregation should be done horizontally. Raw food shall be stored below ready to eat food.
- The segregation of raw foods of animal origin to other raw foods in different cooling cell shall be done where possible.
- Raw eggs shall be placed segregated from other food. If not possible the storage below other raw foods, preferably next to poultry is recommended. The eggs need to be foiled to minimize cross contamination.
- All outer packaging material has to be removed before being delivered to the kitchen, where possible.
- Outer packaging material may not be present in refrigerators, where prepared or ready to eat food is stored.
- No food shall be stored on the floor.
- Wooden pallets are not allowed in the refrigerators and freezers and only in dry stores where there is a risk of contamination a cardboard layer must be inserted.

3. Protecting Food Items against Air-Borne Contamination

All food items in food storage areas shall always be appropriately covered so as to prevent contamination from chemical / physical hazards and the transfer of bacteria, odour and taste from other foods.

- All food bins, trays, containers, baskets or all other self-contained receptacles are always completely covered.
- Appropriate materials for covering shall include plastic film, aluminium foil and plastic covers.
- Physical / chemical hazards include any substance (liquid or solid) originating from ceilings, refrigerators/freezers, condensers, ventilators, faulty pipes, on-going construction, renovation, etc. shall be prevented.
- The top food shelve in the blast chiller has to be covered to avoid contamination with condensing water.

4. Date Marking and Rotation of Foods

- All foods shall be date marked at all times throughout Food Handling and use of expired foods shall be prevented.
- All foods shall be date marked at each of the following times:
  - Once foods are placed in Food Storage Areas with receiving date or the expiry date.
  - Once frozen foods are removed from the freezer with the date of removal from the freezer.
  - Once pre-packaged foods are opened with the date the package was opened.
  - Once foods are processed,
  - Once foods are portioned,
  - Once food is put in the freezer it has to be marked with the date of freezing
- Food items shall be date marked either by using easily visible date codes or colour codes. All food handling employees must appropriately understand date coding or colour coding procedure
- FIFO (first in first out) system shall be consistently used to ensure that the oldest stock is always used first.

5. Internal shelf life

Hot food items for reheating: 48 hours, cooking to customer.

Raw cut products (e.g. Carpaccio, Beef tartare, …) have to be freshly made (short (2hours) before the next service only). All surfaces of the filet have to be cut away before starting. Opened matured meat and cheeses (e.g. Proscuitto) have a shelf life according to their manufacturer. The first slice of pre opened product shall be thrown away.

Opened potentially hazardous food like sausages and fresh cheese has to be used within 48 hours. Re-vacuumed food gets an additional shelf life of 48 hours.

Manipulated cold ready to-eat potentially hazardous food items 36 hours, first handling to customer (e.g. sliced sausages, sliced fresh cheese …).

Living products like lobster have to be alive prior preparing. Maximum storage time: 36 hours, receiving to handling.

Storage assembly: usage on the same day.

Outdated Food items shall be discarded and not be served to customers. If they are not discarded on the spot they shall be segregated from other foods with a “do not use” or “to be discarded” label.

In house frozen foods shall be kept at -18°C for max. 3 months.

Related Documents

- Checklist SOP5

Responsible:	Storage Staff Production Staff	**Corporate:**

SOP 6 Food Thawing

Purpose

To ensure that growth of pathogenic micro organisms are controlled and foods are not contaminated during food thawing

Scope

Thawing of any frozen food.

Procedure

Segregation between raw and ready-to-eat food shall be maintained during thawing.

Following appropriate thawing methods shall be used;

- under refrigeration (thawing room, cooling cell, or refrigerator…)
- small amounts in cold water

Thawing in cold water necessitates that product be packed in water-tight packaging.

Once thawing is completed food shall either be immediately used or transferred to a refrigeration unit.

Thawed food must not be refrozen.

Foods for thawing shall be labelled with appropriate date marking (label shall indicate the day it was removed from the freezer)

Time of thawing depends on product size and volume, thawing method and temperature.

In general, raw foods shall be heat treated within 4 days from start of thawing.

Related Documents

- None

Responsible: Production Staff **Corporate:**

SOP 7 Washing and Disinfection of Raw Vegetables and Fruits

Purpose

To ensure safety and cleanliness of raw vegetables and fruit.

Scope

Raw purchased vegetables and fruit likely of being contaminated with foreign bodies, insects and soil shall be washed prior to portioning and delivery.

Raw purchased vegetables and fruit likely of being contaminated with harmful micro organisms (organically grown) shall be disinfected in addition to washing when no constant potable water supply is certain.

Procedure

1. Cleaning of vegetables and fruits

Raw purchased vegetables and fruits shall undergo the following steps of cleaning prior to use in restaurant meals:

- Preparation (removal of damaged parts, major foreign bodies, separation of leaves etc.)
- Washing in water of potable water quality
- Inspect to verify cleanliness
- For areas were a constant supply of potable water is certain disinfection of fruits, vegetables and fresh herbs is not compulsory. Legal requirements have to be met.

2. Disinfection of vegetables, fresh herbs and fruits for raw consumption

The requirement of disinfection depends on water quality and the growing method of the product.

Raw purchased vegetables grown by use of organic fertilizer (night-soil, sewage) shall undergo the following steps of cleaning prior to use in restaurant meals:

- Preparation (removal of damaged parts, major foreign bodies, separation of leaves etc.)
- Wash / disinfection in a solution of a chemical disinfectant of appropriate type and concentration. Disinfectant chemical must be approved for use on food.
- If chlorine is used the concentration shall be between 50-100ppm. Exposure time shall be min. 5 minutes.
- For all other chemicals, concentration and exposure time must be as per manufacturer’s specifications.
- Legal requirements have to be met.

Related Documents

- none

Responsible: Production Staff **Corporate:**

SOP 8 Food Handling

Purpose

Food shall be handled in such a way that:

- Unsafe microbiological, physical or chemical food contamination from food handlers, food handling equipment and environment is prevented.
- Unsafe microbiological growth is prevented.

Scope

Handling of raw foods of animal origin, raw foods of vegetable origin and ready-to-eat foods.

Procedure

1. Prevention of Cross contamination

Segregation of raw and processed food during preparation and handling

Segregation of preparation and handling of raw food of animal origin, vegetables/fruits and processed food have to be realised through equipment or time. In case of segregation by time used equipment has to be cleaned and sanitised between the processes.

Use of colour specified cutting boards

Different products have to be handled on colour coded cutting boards:

Raw meat	Raw vegetable/fruits
Raw Poultry	Ready to eat food (cooked meat, fish, poultry, ham, cheese, peeled/washed vegetables/fruits, smoked salmon, sushi, carpacio
Raw fish	

Cutting board has to be maintained thoroughly. Boards with cuts and/or furrows have to be sorted out and either destroyed or repaired to remove all grooves which may harbour potentially harmful bacteria.

Handling of knives and other kitchen tools

Knives et al. have to be stored in easily cleanable boxes or drawers.
During breaks and working interruptions knives and equipment have to be cleaned and stored in a clean place.
Before use knives and other handling utensils have to be sanitised.
Knives and other handling utensils must be cleaned and/or disinfected after each handling job.

Prevention of bacterial contamination by staff

Please follow Procedure Personal Hygiene (SOP 9).

Prevention of microbiological contamination from the environment

Food handling environment shall be maintained and kept clean.
The use of outer packaging materials should be minimised in the kitchen.
Food should be stored covered.
Chilled food should be handled in the kitchen without refrigeration for a short possible to prevent bacterial growth.

2. Handling of High Risk Products

Raw eggs

For handling raw eggs an area, segregated from other production areas, has to be determined in the kitchen. Segregation can be done also by time.
Disposable aprons have to be worn during handling with raw eggs.
Egg shells and egg packaging materials have to be removed immediately from the kitchen.
The area has to be cleaned and sanitised after the handling process.
Eggs with broken shell are not allowed to be used.
Albumen and yolk have to be used immediately or stored chilled and covered and used within 24 hours.
For cold mix products pasteurised eggs must be used (Tiramisu, Mousse, …)
Batter (e.g. used for Wiener Schnitzel) has to be stored chilled and used within 12 hours
Industrial mayonnaise should be used. Self made mayonnaise must contain pasteurised eggs. The pH-value is lower than 4,5; this shall be validated by the QA-Responsible during Hygiene check.

Minced meet, fish, poultry

Purchased fresh minced products have to be used on the day of delivery.
Self made minced products have to be produced from fresh, high quality products. These products have to be heated on day of mincing.
Storage temperature of minced products is below 4°C / 39°F.

Chip fat

Maximum temperature of heating is lower than 175°C / 347°F.
Daily sensory tests have to be performed, i.e. when the oil is dark in colour or foaming it shall be changed. Fat has to be changed after observed deviations.

Salads

Salads of potatoes or salads containing cream has to be served immediately after production (not more than 2 hours) or stored chilled.
Cooked eggs and potatoes have to be stored unpeeled and chilled. After peeling, the products have to be processed immediately. Salads of these products have to have a pH lower than 4,5 and have to be consumed within 36 hours if chilled.

Heating and Reheating of food

Whole muscle meat (beef, lamb, salmon, tuna) has to be seared on all external surfaces.
Minced products, stuffed products, raw eggs, poultry shall be cooked to core temperatures of minimum 74°C. Sauces, soups and stew have to be thoroughly boiled.

Chilling of cooked food

All cooked food which is not served within one hour has to be chilled within two hours to temperatures lower than 10°C. Thickness of the products should be as small as possible, sauces shall be chilled in small containers not deeper than 4cm.

Buffet

Storage time for non-temperature controlled cold buffet shall be not more than 1 hour or a maximum food surface temperature of 15°C.

Critical limit for cooled temperature controlled display: Storage temperature of refrigerated high-risk foods max. 4°C

If refrigeration temperature exceeds significantly* 4°C, check if there is a technical error and check food temperature. If food surface temperature exceeds 7°C and there is a technical error transfer to another display (otherwise check if temperature is coming down). If food surface temperature exceeds 10°C, discard food.

The temperature has to be monitored 3 times a day. Shelf life of food in cooled display is max. 36 hours.

* significant means a deviation of ± 3°C or more

Hot served products have to be held over according legal requirements (e.g. Austria 70°C) for not more than 90 minutes.

3. Handling of High Risk Equipment and Packaging

Packaging materials
Supplier packaging materials are not used for packing other products (e.g. banana cart boxes for sandwiches).
It is not allowed to put dirty outer packaging materials direct on clean surfaces like working tables.
Clean packaging materials have to be stored in a clean area, segregated from raw food and cleaning detergents.

Use of tissues
Disposable cleaning tissues have to be used instead of cloth tissues.

Related Documents:

Checklist(s) SOP 8

Responsible: Production Staff **Corporate:**

SOP 9 Personal Hygiene

Purpose

To prevent microbial and physical food contamination from food handlers and to ensure adequate protection measures by employees and visitors.

Scope

This policy applies to employees who have direct contact with food, and also applies to external visitors to food handling areas, who may have direct food contact during their visit.

Definition

Food handlers are employees who during their work have direct manual food contact, especially employees of food handling areas e.g. cold kitchen, hot kitchen and pastry. Possible staff from other areas, which may occasionally or regularly be employed in food handling areas are also considered as food handlers.

Procedure

1. Restrictions for Food Handling

Food handlers must be fit for food handling.

Food handlers suffering from skin infection (boils, discharging cuts and wounds, heavy burns, heavy eczema) must not handle food until cleared by a competent Medical Authority.

Food handlers suffering from confirmed (diagnosed) intestinal infection must not handle food until cleared by a competent Medical Authority.

Food handlers with symptoms of intestinal infection (diarrhoea, abdominal pain, vomiting, possibly fever), sore throat, jaundice, must not handle food until cleared by a competent Medical Authority.

Food handlers shall be instructed to report immediately to management when experiencing symptoms of intestinal infection or skin infection.

2. Control of Gastro-Intestinal Infections nasal /throat infections and Skin Infections of Food Handlers

Control by interview and signing of Health Agreement for DO & CO Food Handlers shall be made upon new employment and confirmed annually.

Annual stool testing of each food handler and cleaning staff has to be done. The test has to be repeated after visiting countries with increased risks of infections e.g. Africa.

Procedure for control upon new employment:

- Applicant shall fill in Health Agreement for DO & CO Food Handlers and cleaning staff.
- If applicant reports or appears to suffer from chronic or recurring eczema / skin rash the applicant shall not be employed for food handling.
- If applicant is suffering from boils, weeping wounds/cuts, the applicant shall not be employed for food handling until the condition is healed, as confirmed by a competent Medical Authority.
- If applicant is suffering from diarrhoea, sore throat or jaundice, the applicant shall not be employed for food handling until examined and subsequently cleared by a competent Medical Authority.
- Stool test not older than 3 months where applicable.

Procedure for annual confirmation of Health Agreement for DO & CO Food Handlers

- Food handlers shall fill in Health Agreement for DO & CO Food Handlers
- If a food handler is suffering from chronic or recurring eczema the food handler shall use disposable gloves in all food handling **or** be transferred to a non-food handling position. In addition the food handler shall be offered medical treatment if locally available.
- If a food handler is suffering from boils, infected wounds/cuts the food handler shall be removed from food handling and sent for medical treatment. The food handler may return to food handling after clearance by a competent Medical Authority.
- If a food handler is suffering from diarrhoeal disease the food handler shall be removed from food handling and sent for medical examination including stool testing. The food handler may return to food handling after clearance (as per national legislation) by a competent Medical Authority.
- If a food handler is suffering from other infectious disease assumed to be transmissible through food, DO & CO Regional QA shall be consulted.

3. Hand Hygiene

Food handlers shall maintain skin and nails of hands in a good condition. Nails shall be kept short and without nail polish. False nails must not be used during food handling. Rings, bracelets and watches are restricted in food handling, as per section 5. Personal Hygiene Restrictions of this chapter.

Cuts, scratches not showing signs of infection shall be covered with a waterproof, coloured dressing or plaster. During food handling, the dressing or plaster must be covered by a disposable glove.

Hands shall be washed whenever needed, especially at the following occasions:

- When entering food handling areas
- Before starting work
- After handling raw food
- After visiting the toilet, eating, drinking, coughing, sneezing and smoking
- Before and after use of disposable gloves
- After breaks
- After completion of unclean tasks
- After touching potentially contaminated surfaces such as raw food products or any skin
- In all other instances where cross contamination may be an issue.

Hand wash shall be performed thoroughly by use of soap and warm water. Hands shall be dried thoroughly after washing. An alcohol based sanitiser shall be applied after hand washing.

Wound and Infection Control

Cuts, scratches, burns, lesions and other wounds between elbow and wrist not showing signs of infection shall be covered with a waterproof, coloured dressing or plaster. During food handling, the dressing or plaster must be covered by a disposable glove.

Employees with secretions or discharges must be excluded from direct food contact work.

All food items have to be disposed, all equipment has to be cleaned/sanitized that the employee was working with when cut or wounded.

First aid boxes, containing coloured plasters, antiseptic lotion, waterproof dressings, plastic gloves has to be available to all employees

Hand Hygiene during Handling of Ready-to-Eat Foods

Handwashing is an effective method for removal of transient bacteria from the skin of hands. Handwashing is not an effective method for removal of *Staphylococcus aureus* from the hands of Staph aureus carriers.

Use of disposable gloves is an effective and recommended food protection measure, provided that gloves are whole and undamaged. Use of gloves may easily be monitored visually.

For the above reasons direct handling of ready-to-eat foods shall be performed through the use of disposable gloves. In specific cases, where gloves may be difficult to use or where gloves may constitute a potential health & safety hazard, use of gloves may be replaced by a hand wash and then use of skin disinfectant.

Food handlers shall dispose and replace gloves at following occasions:

- Before starting work
- Following breaks, visiting toilets, eating, drinking, coughing, sneezing and smoking.
- After touching potentially contaminated surfaces such as raw food products or any skin.
- After changing product type
- In all other instances where cross contamination may be an issue.

Before wearing new gloves hands shall be thoroughly washed (see above).

Hand disinfection: Use of alcohol-based (70%) hand disinfectant including skin moistener after hand wash is the preferred choice of skin disinfectant. Use of disinfectant may not replace hand wash.

Instructions for use of alcohol disinfectant:

- Dispense 3 ml into hands
- Rub hands to disperse disinfectant
- Let air dry for 30 seconds before resuming food handling

4. Working clothes

Food handlers shall wear suitable and clean working clothes, incl. hair covering, and maintain a neat visual appearance.

The working clothes consist of:

- trousers
- jacket, apron, coat, blouse or shirt
- possible additional clothing supplied for reason of comfort, such as insulating vest
- Uniform must be changed when necessary.
- Uniform must be commercially cleaned.
- Hairnets must completely enclose hair (except show cooking and buffet)

When entering and working in the following areas, staff must wear the clothing indicated above.

5. Personal Hygiene Restrictions

In order to prevent food contamination and to satisfy expectations of customers and authorities the following personal hygiene restrictions apply:

- Smoking, eating, drinking, spitting and chewing gum is not permitted in areas for production, storage, handling and transportation of food and equipment.
- Jewellery, such as necklaces, bracelets, watches, finger rings, earrings and facial studs must not be worn by food handlers during food handling.
- Nail polish must not be worn by food handlers during food handling.
- False nails must not be worn by food handlers during food handling.
- There must be a first aid box available accessible to all employees every time. First aid boxes must contain a sufficient supply of each of the following;
  - coloured waterproof plasters
  - antiseptic lotion

6. Visitors to Food Handling Areas

Visitors who intend to enter into a food handling area shall be asked to complete a “Health Questionnaire” before entering.

Visitors who declare and also show sign of any gastrointestinal and nasal /throat infection are not allowed to enter into food handling area.

Visitors with infected skin problem can not enter unless they accept to wear gloves in food handling areas.

Related documents

- Health Agreement for Food Handlers
- Questionnaire for visitors
- Medical examination (stool testing, x-ray)

Responsible: All staff **Corporate:**

SOP 10 Cleaning and Disinfection

Purpose

To ensure visual cleanliness of non-food and food contact surfaces, as well as microbiological cleanliness of food contact surfaces.

Scope

- Cleaning procedures include pot wash, dishwash and manual cleaning of main surfaces and fixed equipment of food handling areas.

Procedures

Storage and Labelling of Chemical Agents Used for Cleaning and Sanitization

Chemical agents has to be stored in safe distances to food
All chemical agents has to be labelled
Specification sheets are for all chemical agents available

Selection of Detergents and Disinfectants

Detergents and Desinfectants which are used in production areas have to be food graded. For each product a specification sheet has to be available.

Cleaning Program

Procedures of daily cleaning and periodical cleaning shall be detailed in a cleaning program. Cleaning program must specify each of the following;

- surface or areas must be cleaned if required disinfected
- Frequency of cleaning and disinfection
- Method of cleaning and disinfection
- Chemical agents to be used and the procedure of application (concentrations, contact time, equipment required etc)

Pot wash and Dish wash

Primary duty of the pot wash is to ensure *safe wash, disinfection and storage of food equipment and utensils.*

The pot wash may be performed in the dishwash area or in a separate pot wash area.

A separate pot wash area shall be located as to ensure short transportation of goods from production area to pot wash and vice versa.

Temperature of wash water shall be 55 - 65º C (131 – 149°F). Temperature of final rinse, as monitored on machine thermometer, shall fulfil local legislation to temperature and water pressure with recommended temperature minimum of 83ºC (boiler) and 71ºC at the washed equipment. The temperature should be checked by the responsible RHM.

Storage of Clean Equipment

Clean equipment shall be visually clean and stored as to permit quick drying.

Visibly unclean equipment shall be sorted out for soaking and re-washing before storage in clean equipment section.

Unclean equipment shall be sorted out for soaking and re-washing before storage in clean equipment section.

Store for clean equipment shall be well separated from other dishwash sections, either by wall or by distance.

Storage of Specific Utensils

Cutting boards shall be stored vertically with air space in between to ensure quick drying.

Piping bags: The single use disposable bags are recommended. Tissue bags may be used as support for disposable types when piping heavy foods. If used, tissue bags shall be stored after wash as to ensure quick drying, i.e. on racks.

Food containers shall be stored upside down.

Storage of Clean Equipment

Clean equipment shall be visually clean and dry before stacking and storage.

Equipment should be stored upside down. If this is not possible, equipment has to be covered.

Cleaning and disinfection of food contact surfaces

Cleaning of food contact surfaces includes tables, cutting boards, slicers, can openers, thermometers, knives, scoops, mincers, mixers, blenders and utensils shall include disinfection.

Disinfection may be achieved by application of chemical disinfectant after normal cleaning or by cleaning with a combined detergent / disinfectant.

Other chemicals in accordance with manufacturer's specification.

Cleaning of Special equipment

Cleaning of Whipped Cream Dispenser
Daily cleaning of dispenser is necessary
Deflating of the dispenser
Demounting according manufacturer regulations
Cleaning with hot water and disinfectant
Rinsing with hot water and drying
Composing of the dispenser
Rinsing with hot and cold water

Cleaning and disinfection of Dispensing equipment
Daily cleaning
- Components which get in touch with drinks and air should be cleaned with warm water (e.g. Pass armatures, dripping cup sink and brushes)

Intermediate cleaning
- Complete pass armature is filled with special cleaning dilution
- Wait 20 minutes
- Rinse out tapping head
- Rinse two times with cold water
- Run radiator needs to be turned off during cleaning

Periodical cleaning
- Every three months the whole dispensing equipment needs to be cleaned and documented
- The cleaning has to be done by an external company
- Legal requirements have to be met

Related Documents

- Cleaning Program

Responsible:	Cleaning Staff Production Staff Technical staff	**Corporate:**	Quality Assurance

SOP 11 Physical Hazards

Purpose

To prevent foreign bodies in food.

Scope

Purchased food and in -house produced food at any stage during production, handling, storage and delivery to the customer.

Definition

A physical hazard is a foreign body in food with the potential to cause an adverse health effect. Contamination of food with a foreign body may compromise product safety and can significantly damage a food business.

Common hazardous foreign bodies include pieces of glass, light bulbs, equipment, staples, strings, rubber bands, metal objects, twist ties, hair, buttons, plastics, minerals, wood. Other food-related foreign bodies include hair, plasters and insects.

Procedures

1. Glass Handling Procedure

Use of glass in food handling areas shall be avoided.

- All glass surfaces shall be covered with a proper plastic film.
- Food in glass packaging should be purchased in alternative packaging when available
- Opening of glass jars shall be done outside of food handling area.
- Content of glass jars shall be transferred into a plastic or stainless steel containers for storage
- Glass jars must be stored at the lower shelf in plastic bins.
- Glass jars must always be transported in plastic bins
- Customer glass equipments must also be stored in plastic bins.
- Customer glass equipments must be checked before use. Chipped cracked or otherwise damaged items shall be discarded.
- In case of breakage in food handling area all glass pieces shall be picked up and be wrapped with paper and thrown away in a waste bin. Possible food likely of being contaminated shall be discarded
- Lamps, of fly catchers, must be coated with a shatterproof film.
- When breakage of glass, china or melamine occurs in food handling area a breakage checklist shall be completed.
- All suppliers shall be asked to implement an effective glass control procedure. Effective measurements have to be specified to the customer.

Metal handling procedure

- Food handlers must not wear metal rings, earrings, necklaces, bracelets, facial studs.
- Foods in packages with metal clips must not be brought into the food handling area.
- Tins have to be opened and decanted outside of areas where opened food is handled or stored.
- Using staples or similar is not allowed
- Technicians who do maintenance work in the food handling area shall take all precautions to avoid food contamination by metal pieces.
- Through preventive maintenance presence of loose metal pieces on the equipment shall be prevented.

- After maintenance in a production or storage area the working place has to be controlled by a responsible person, and the area or equipment signed off before being allowed back into production.
- All suppliers shall be asked to implement an effective metal control procedure. Effective measurements have to be specified to the customer.

3. Stone / hard piece control procedure

- Fruits and particularly vegetables must be thoroughly washed to remove the foreign objects
- All suppliers shall be asked to implement an effective stone control procedure

4. Hair control procedure

- All food handlers must cover their hair. Where direct contact with guests is common chef hats are acceptable (Show kitchens, buffets).
- All food handlers shall wear protective uniforms.
- Food handlers shall not dispose or replace gloves near to the working tables.
- All foods in the stores must be covered to prevent foreign object contamination.

5. Wood procedure

- It is not allowed to use equipment or utensils made out of wood except working surfaces necessary for dough manipulation. This surface has to be well maintained and regular inspections carried out.
- Unavoidable utensils (sushi bambus) shall be maintained well and cleaned/disinfected thoroughly before used.
- Fruits and particularly vegetables must be thoroughly washed to remove the foreign objects

6. Other

Rubberbands have to be avoided. Bands which are part of vegetable packaging have to be removed before entering areas where open food handled.

All kind of packaging materials which can cause physical contamination has to be removed before entering areas where open food handled.

Flasks with sealed plastic screws have to be opened in areas where no open food is handled.

All persons have to be trained to clean shoes before entering the production area.

Documents

- Supplier Audit Checklist

Responsible: All Staff **Corporate:**

SOP 12 Chemical Hazards

Purpose

To protect food from chemical contamination.

Scope

Purchased food and in-house produced food at any stage during production, handling, storage and delivery to the customer.

Definition

Some harmful chemicals which may be available in the food handling areas for different purposes can contaminate food.

Procedures

1. Contamination from the cleaning chemicals

- Cleaning agents shall be stored separately
- Cleaning agents to be used in the food handling area shall be stored at a safe distance from all food items.
- All chemical agents shall be identified with labels
- Only approved chemicals shall be used in the unit.

2. Contamination from pest control agents

- Pest control chemicals must only be by the pest control contractor staff
- No spray chemical treatment against pests shall be applied in food handling areas.
- No rat and mice stations with poisonous bait shall be allowed in the unit.
- Only approved chemicals shall be used by the pest contractor.

3. Contamination from lubricants

Only food grade lubricants must be used for food equipments.

4. Pesticides

- Suppliers of food have to meet legal requirements
- Fruits and particularly vegetables must be thoroughly washed

Responsible:	All Staff / External Company	**Corporate:**

SOP 13 Food Safety Training

Purpose

Managers and employees are trained to provide knowledge and skills required to assure safe food preparation.

Scope

Food Safety Training for managers and employees.

Procedure

Training of Managers

Management shall be trained to have a complete understanding of the DO & CO Food Safety system.

New Employee Training

All employees have to read the Hygiene instructions for new employees. A short examination has to be done. In case of failure the test they have to be instructed by the QA. Employees have to sign that they understood given information. The signed form has to be stored in the personnel file.

Refresher training

- Once per year all employees shall be trained on relevant SOPs. A training plan shall be used to plan refresher training.
- Refresher training shall also be carried out any time for employees whose food safety practices show deviations from the standard.
- All employees shall be trained on the training module; introduction to Food Safety and Hygiene as basic training module.
- The effectiveness of the training has to be checked by the trainer. Three different methods are possible:
  - Written examinations
  - Verbal examination referring to the completed training
  - Evaluation “on the job”

Related Documents

- Training survey
- Training records
- Training record for new employees
- Basic Food Safety Training Module; introduction to Food Safety and Hygiene
- SOP training modules

Responsible: Quality Assurance **Corporate:**

SOP 14 Validation of Measuring Equipments

Purpose

Temperature measuring instruments shall be validated to ensure their accuracy.

Scope

Restaurant thermometers for control of temperatures of food, refrigerators, freezers, dish washers and food handling areas, i.e. fixed / loose thermometers of cold stores, dishwashers, probe thermometers and Infra-red thermometers have to validated.

Definitions

By validation it is understood in this context: Validation of Restaurant thermometers by use of calibrated probe thermometers.

Procedure

- Thermometers must be available at all times on the equipments and in the areas where a temperature measurement is required.
- Thermometers shall be validated by use of a calibrated reference probe thermometer or by using iced water and/or boiling water.
- Thermometers in cold stores have to be validated at least twice a year. Probe- and surface thermometers have to be checked also twice a year.
- Each thermometer (probe, cold store, infrared) shall be identified with a code and validation records of thermometers shall be maintained.
- When a thermometer reveals any deviation within a tolerance of ±1°C for probe thermometer and ambient thermometer and ± 2°C for infrared thermometer this deviation shall be noted on the records. If deviation exceeds this tolerance, thermometer must be adjusted or replaced.
- Calibrated reference thermometer must be checked periodically with records to confirm.
- The company which performs the calibration of reference thermometer must be accredited.

Related documents

- Thermometer validation records

Responsible: Quality Assurance **Corporate:** Engineers

SOP 15 Preventive Maintenance

Purpose

To ensure that all the equipments which have direct impact on food safety are under a preventive maintenance program in order to secure that they are functioning consistently.

Scope

All the equipment which has a direct impact on food safety (cold stores / freezer, oven, blast chillers, air chilling, pot / dishwashing machines, etc.) have to be included.

Procedures

A preventive maintenance program that includes the periodic maintenance plan of the food safety related equipments shall be prepared and implemented.

For facilities and equipment which are not in property of DO & CO a written agreement about the responsibility to realise preventive maintenance should be in place.

Preventive maintenance programmes shall include the daily, weekly, monthly, three monthly etc. maintenance for the concerned equipments.

Related documents

- Preventive maintenance program

Responsible:	Engineers	**Corporate:**	Quality Assurance

SOP 16 Pest Control

Purpose

To ensure that chemical, physical and biological hazards caused by rodents, flying and crawling insects / animals are prevented.

Scope

Control of pests in the all areas of the restaurant.

Procedure

Preventive Measures

- Openings (doors, windows, etc.) of restaurant kitchens and storage areas shall be kept closed or be equipped that access by pests is prevented. Windows kept open shall be fitted with fly-nets.
- Where necessary, insect-o-cutors shall be installed. Installation preferably max. 2 metres above floor level, not directly above food handling activities and not to be visible through openings to outside. The use of sticky surface typed insect-o-cutors is recommended.
- Preventive pest control inspections for presence of rodents, flying and crawling pest must be carried out at defined and sufficient intervals by a competent contractor.
- Areas, including drains shall be rodent proof.
- Animals e.g. cats, dogs and birds must not be found inside premises.
- Preventive actions against birds outside of premises, especially in the delivery area have to be addressed.
- Outside waste collection areas have to be controlled by the contractor.
- Records of pest control activities shall be kept on site.

Related documents

- Documents by the pest contractor

Responsible: Quality Assurance **Corporate:**

SOP 17 Water Treatment

Purpose

Water used for food production must be safe. Water used for cleaning and pot/dish washing must be at specified quality.

Scope

Water and for food production, cleaning and pot/dish washing

Procedure

- Water supplied to the unit for food production must be in accordance with “Guidelines for drinking water quality WHO” and local legal requirements. Unit shall get documented proof that supplied water is at required microbiological and chemical quality.
- When the safety of supplied water is not guaranteed, the unit shall install some systems to ensure that water is disinfected (chemical disinfection, UV application etc)
- Unit shall check and document the disinfection effectiveness of the system periodically.
- Hard water shall not be used (over 5-6 German hardness) for cleaning and pot / dish washers as hard water complicates cleaning. Water softeners shall be used to decrease water hardness.
- Water used for ice machine must be safe. Active carbon filter can be used to remove undesired odour, taste of water used for ice machines and tea / coffee pots.

Related documents

SOP24 Analysis of Food, Water, Hands and Surfaces.

Responsible:	Engineers	**Corporate:**	Quality Assurance

SOP 18 Food Traceability and Product Recall

Purpose

In case of awareness of an incident which can cause severe or temporary impairment of health, further harm has to be minimized.

1. Analysing the problem
2. Informing all relevant persons
3. Analysing the source of the problem and traceability
4. Setting Corrective Actions
5. Legal Requirements

For minimising the consequences of an incident the unit has to implement a system for traceability:

- Trace within a reasonable time the supplier of a food or a beverage determined for recall.
- Track within a reasonable time the customers to whom the food or beverage for recall is supplied.

Scope

Tracing and tracking of any given food or beverage following the principle of “one step back, one step forward”, by means of an IT system or by manual checking of Meal Specifications, Beverage/Bar specifications and Miscellaneous Specifications.

Definitions

Tracing: Systematic identification of the supplier from, or through, whom a food or beverage has been purchased.

Tracking: Systematic identification of the customers to whom the food or beverage has been supplied.

Internal tracking: Systematic identification of additional menus (in addition to the primary menus in which the food is used) in which the actual food, or residuals hereof, is used as an ingredient.

Recall: used in situations when there is a reasonable probability that use of a product will cause serious foreign body contamination or is likely to cause serious health consequences Withdrawal of a product from the marketplace by manufacturer, supplier, health authority or customer due to minor violation that is not subject to legal action.

Product suspected of adulteration or contamination that is restricted from use, is held and labelled pending confirmation of test results, risk assessments, etc.

Meal specifications: Specifications of the entire selection of meals supplied to customers.

Beverage/bar specifications: Specifications of the entire selection of beverages / bar items supplied to customers.

Examples which can activate Traceability or Product Recall:

- Presence of a microbiological pathogen
- Food product contaminated with a toxic chemical

- Presence of a life threatening, undeclared allergen
- Glass or metal fragments in food
- Unsafe pesticide residues
- Presence of Histamine in fish
- Labelling violations
- Mould or yeast contamination
- Spoilage

Procedure

Following steps has to be organized:

1. Analysing the problem (Which meals and where are the meals now?)

Analysing if the food or food components

1. were already served to consumers (and how many)
2. are still in the restaurant or in the influence of DO & CO

2. Informing all relevant persons which can contribute to minimize the possible harms or finding the source of the problem

In each restaurant relevant personnel have to be informed. In either case the Regional Hygiene Manager has to be involved. Depending on the type of incidence local authorities, Insurance agency or DO & CO law department has to be informed.

Relevant persons who can assist in the event of a recall are:

- Unit management
- Division Management
- Head chef
- Supplier
- Customer
- Quality Assurance

3. Analysing the source of the problem

Analysing which components, ingredients or auxiliary materials could have caused the incident, which meals were produced with the risk items and where the meals and/or the risk items are stored.

Take samples of suspect food

4. Setting Corrective Actions

Elimination of the risk items

Contacting and information of the customers or affected consumers

5. Legal requirements

Packed products have to be labelled according to EG/VO 2000/13, allergens and GMO (where applicable). Additives in food and beverages sold in Germany have to be declared (eg. In menu).

Responsible: All responsible Staff **Corporate:**

SOP 19 Facility Requirements

Purpose

To facilitate safe food production, storage, handling and transportation, as well as to fulfil expectations of customers and Health Authorities.

Scope

Requirements of this standard procedure are valid for new constructions as well as major refurbishments of existing restaurants.

Procedure

Layout of Restaurant Kitchen

The restaurant shall be designed in such a way that:

- Clean and unclean areas, processes and products are segregated
- Cold chain of food is maintained throughout the food flow

The final lay-out of new restaurants and major modifications of existing facilities shall be assessed by Regional QA.

Segregation Principles

Segregation in food storage (refrigeration):

See SOP 5 Food storage

Segregation in food handling:

See SOP 8 Food handling

Segregation requirements in other areas

See SOP 10 Cleaning & disinfection

Control of Ambient temperatures

Food handling areas

- In order to enable compliance with SOP 8, a maximum ambient temperature of 18°C of areas for handling of chilled food is set for new facilities and major refurbishments.
- In order to facilitate easy compliance with SOP 8 it is strongly recommended, at least for new constructions and major refurbishments, to operate ambient temperature of food handling areas below 15°C.
- Ambient temperature of heat-generating food production areas, such as hot kitchen should preferably not exceed 28°C for staff comfort reasons.

Non-food handling areas

- Ambient temperature of dishwashing and pot wash areas should preferably not exceed 28°C for reasons of staff comfort and pest control.
- Ambient temperature of staff facilities should preferably not exceed 28°C for staff comfort reasons.

Hygienic Quality of Surfaces and Installations

General criteria

Material and design of surfaces of the restaurant shall be selected with due consideration of the intended use as well as the intended cleaning method.

- In general surfaces shall be durable, non-absorbing, non-corrosive, smooth and easy to clean. In addition surfaces shall fulfil possible requirements to work protection.
- Surfaces shall be maintained, kept clean and tidy to the extent which satisfies DO & CO corporate identity, local legislation and customer expectations.
- Damage, breakage of food contact surfaces, food equipment and utensils shall be repaired or exchanged in order to prevent food contamination with foreign bodies.

Floors

Floors shall consist of:

- Tiles with joints applied level with tile surface
- Alternative material with similar properties with regard to durability, imperviousness and cleaning properties, e.g. epoxy based and similar approved materials.

Practical colours of floor surfaces should be chosen.

Floors of wet areas shall be laid out so that water from cleaning etc. runs towards the drains and does not stagnate on floor.

Connection between walls and floors shall be coved skirting.

Drains

Drains shall be of sufficient size.

Drains of wet areas shall be installed in such a way that water will flow from floor into drains without formation of pools of stagnant water around drains.

Drain gratings shall be rat-proof and shall be easy removable for cleaning.

Walk-in refrigerators shall have no drains.

For new (re)constructions food industry recommended drains has to be used

Drains must flow from high risk areas to low risk areas.

Walls

Walls shall be solid without interior hollow space for pest control reasons. Wall surface shall be smooth and easy to clean. Surface to a minimum height of 2 metres shall consist of:

- Tiles with joints applied level with tile surface
- Alternative material with similar properties with regard to durability, imperviousness and cleaning properties, e.g. epoxy based and similar approved materials.
- Surface material shall be fitted tightly to the wall in order to prevent formation of a hollow space between wall and surface.

Surface penetrations for pipes, ducts etc. shall be effectively sealed for pest control reasons.

Whenever necessary walls and wall corners shall be protected by suitable fenders of stainless steel or synthetics. Fenders shall be designed and installed as not to provide hiding places for pests.

Tops of partition walls less than 2 metres high shall decline 45 degrees in order to prevent accumulation of dust and possible storage of irrelevant items.

Doors

In general doors shall be self-closing. Doors to the exterior shall be fitted as to prevent access of insects, rodents and birds.

Windows

Windows to the exterior shall be fly-screened (max. 1.5 mm) if they can be opened.

Window sills shall be avoided for reasons of hygiene and tidiness. If present, sills shall decline 45 degrees towards the room.

Ceilings

Ceilings shall be tight, smooth and washable.

Open ceilings are generally preferred to suspended ceilings for pest control reasons.

Overhead structures, e.g. pipes and cables below ceiling shall be cleaned with regular intervals, e.g. twice per year in order to prevent excessive accumulation of dust and dirt.

Walk-in refrigerators

Floors, walls and ceilings shall fulfil general requirements described above.

Evaporators shall be well maintained and kept clean.

Doors shall be durable, easy to clean and self-closing.

Foods and food containers in walk-in refrigerators must not be stored directly on floor, but shall be stored on shelves or pallets as to permit effective stock rotation and control, as well as air circulation around food containers (min. 5 cm between food and wall and minimum distance between floor and lower shelf 30 cm).

Shelves shall be made from stainless steel.

Pallets in walk-in refrigerators for food storage shall normally be made from synthetic material. Wooden pallets are allowed only in refrigerators and freezers used for storage of bulk supplies in original, unopened supplier packaging.

Walk-in refrigerators shall be equipped with thermometers with gauge / display installed on outside of cooler to facilitate temperature monitoring.

Walk-in refrigerators shall be connected to a time / temperature recording system, incl. an alarm device for major temperature deviations.

Walk-in freezers

Floors, walls and ceilings shall fulfil general requirements described above.

Walk-in freezers shall preferably be fitted with a lock (ante-room) of sufficient size to allow passage of transport equipment in order to reduce penetration of warm air into freezer.

Foods, containers etc. shall be stored on shelves or pallets and must not be stored directly on floor.

Foods must not be stored directly against the wall of freezer, and free space of minimum 10 cm between goods and wall shall be maintained.

Walk-in freezers shall always be equipped with thermometers with gauge / display of thermometer installed outside freezer to facilitate temperature monitoring.

Walk-in refrigerators shall be connected to a time / temperature recording system, incl. an alarm device for major temperature deviations.

Dry stores

Floor surface shall be dust-proof concrete, tiles or similar hard, durable, impervious material. If present, drains shall be rat-proof.

Shelves of dry stores shall be made from metal or hard synthetics.

Food and food containers / packages must not be stored directly on floor but shall be stored on shelves or pallets.

Distance between lower shelf and floor to be 30 cm.

Possible windows for opening shall be fly-screened.

Buffets

The buffets shall include protection against spitting. The layout should be in a form that airborne contamination from the guests is not possible.

Hand wash facilities

A hand wash station shall include:

- Basin
- Hot and cold water supply, dispensed through mixing battery
- Water release shall be non-hand / arm operation
- Liquid soap in dispenser, installed on wall
- Paper towels in dispenser, installed on wall
- Waste basket for used towels
- Hand sanitizer unit
- Sign "Wash your hands", mounted on wall.

Number and location of hand wash facilities

- Several stations at entrance(s) to food handling areas.
- 1 station in front of each toilet area.
- Minimum 1 station in each food handling area
- Recommended max. distance from a given working place to nearest station 7 metres.
- 1 station in locker rooms per 10 employees (using locker room at same time / shift).
- Minimum one station in each operations area, dishwashing and pot wash.
- Minimum 1 station between clean and unclean sections of dishwashing.
- Hand washing stations must be used exclusively for washing hands.

Equipment & utensils

Materials for equipment and utensils must be durable, non-absorbent, non-toxic, non-corrosive and easy to clean.

Stainless steel is the preferred material for food contact surfaces. Wooden equipment and utensils shall be avoided to the widest possible extent.

Surface of equipment and utensils shall be smooth and easy to clean.

Equipment and utensils shall be so designed as to avoid hollow spaces, as such space represents traps / hiding places for dirt, waste water and pest.

Equipment and utensils shall be well maintained. Corroded, broken and otherwise damaged equipment and utensils shall be repaired or discarded.

Equipment placed on floor shall be:

- sealed dust-proof to floor or
- raised minimum 30 cm above floor in order to provide access for cleaning or
- rest on wheels in order to facilitate removal for cleaning.

Equipment placed against / fixed to walls shall be sealed dust-proof to wall or be fixed with sufficient free space between wall and equipment to allow cleaning, pest inspection and eradication.

Services

Lighting

Food handling and storage areas must be provided with sufficient natural or artificial light (normal standard min. 500 lux 1 meter above floor).

All light and bulbs in areas where open food is handled must be suitably shielded to prevent possible contamination from glass in the event of breakage.

Ventilation / air conditioning

All areas must be provided with adequate ventilation and / or air conditioning to prevent undesirable odours and vapours.

Water Supply

The water supply to the unit must be of drinking water standard from a source approved by the relevant local authority.

Drainage

All wastewater and effluent must be discharged into a suitable sewage system or other means of disposal that secure effective removal of the wastewater.

A grease interceptor must be fitted to pre-clarify the effluent before entering the disposal system.

The drainage system must be constructed as to prevent access of pest. The percentage incline should be at least 1 in 100.

Waste handling

Waste containers / baskets shall be available in all areas according to need.

Waste containers for wet waste shall be equipped with plastic inserts.

Waste containers shall be cleaned after being emptied.

Waste containers shall be emptied with adequate frequency as to avoid overfilling.

Lids on waste containers are not recommended. If present, lids should be non-hand operated.

Transportation of waste containers to waste collection station shall be performed in a way which prevents contamination of surroundings.

Waste collection station

The waste collection station shall fulfil local legislative requirements to segregation from other areas and from surroundings.

The station shall fulfil local legislative requirements to protection against animals and insects, with special reference to dogs, birds and rodents.

Possible local legislative requirements to ambient temperature of enclosed waste collection stations shall be complied with.

Wet waste shall be stored in a refrigerated room until disposal. Temperature of refrigerated room until disposal. Temperature of refrigerated room shall be max. 10°C.

Wet and dry waste collection station shall be cleaned after each disposal.

Waste separation according to national law.

Responsible:	Engineers	**Corporate:**	Management Quality Assurance

SOP 20 Delay Policy

No delay policy for this standard needed or implemented.

4. Validation, Verification, Improvements-Standard Operation Procedures (SOP)

SOP 21 Validation of the Food Safety System

SOP 22 Internal audits

SOP 23 External audits

SOP 24 Analysis of Food, Water and Surfaces

SOP 25 Complaint Management

SOP 26 Continuous Improvements, Information flow

SOP 21 Validation of the Food Safety System

Purpose

To ensure that the established food safety system effectively controls the determined hazards and the system is implemented being in compliance with the written plan.

Scope

Food safety system to be applied in restaurants.

Definitions

Validation: Obtaining evidence that the elements of the food safety system are effective.

Procedure

Validation of Food Safety System shall be followed-up by Food Safety working group in their periodical review meetings. Regular risk assessment shall be carried-out as validation tool.

Any changes in the process flow, introduction of new food products, application of new techniques etc. shall be assessed and necessary modifications in the system shall be done.

The Preparation of the Validation has to be realised by the Regional Hygiene Manager. Following information has to be collected prior the review meeting:

- Updated Unit data sheet
- Updated maintenance shedule
- Audit results
- AFP reports
- Statistical data of internal and external complaints
- Risk assessment form

Related documents

Risk assessment form

SOP 22 Internal Audits

Purpose

Periodic internal audits are used to monitor the performance of the food safety system implementation in the units. Effective internal audits are essential to determine the areas for improvement.

Scope

A structured internal audit with defined activities.

Procedure

Internal Auditors of DO & CO are designated after a special Auditor Training given by the Food Safety Working Group.

Each year an exchange of experiences has to be organised by the Food Safety Working Group.

Each three years a monitoring audit has to be realised by the Food Safety Working Group with all Internal Auditors.

Global audits are planned by the Division Hygiene Manager.

Regional Internal Audits (RIA) realised by Regional Hygiene Manager (RHM) in units of the designated region of the RHM.

Regional internal audits have to be planned and realised by the Regional Hygiene Manager regularly – minimum quarterly in each unit and in case of realised nonconformities or process changes

Regional Internal Audits have to be realised according to the Audit checklist.

Document controls and on-site inspection are the two essential activities in an audit.

Determined non-conformities and areas for improvement shall be discussed with the unit management at the end of audit.

Internal auditors shall submit an Action plan within two days to the unit management

The unit management has to be complete the Action plan within five days of receipt. This Action plan gives responsibilities and target dates for realising corrective actions and improvements.

Internal auditors shall submit an audit report within 7 days after the audit.

Unit shall take the corrective actions organist the non-conformities and inform the auditor.

Auditors shall verify the implementation of corrective actions.

Global Internal Audits (GIA) realised by Hygiene Manager in other units than in the designated region of the RHM.

Global Internal Audits have to be realised regularly – minimum twice a year in each unit.

Global Internal Audits have to be realised according to the Audit checklist.

Document controls and on-site inspection are the two essential activities in an audit.

Determined non-conformities and areas for improvement shall be discussed with the unit management at the end of audit.

Internal auditors shall submit an Action plan within two days to the unit management.

The unit management has to be complete the Action plan within five days of receipt. This Action plan gives responsibilities and target dates for realising corrective actions and improvements.

Internal auditors shall submit an audit report within 7 days after the audit.

Unit shall take the corrective actions organist the non-conformities and inform the auditor.

Auditors shall verify the implementation of corrective actions

Documents

- Global audit schedule
- Internal audit checklist
- Action plan

SOP 23 External Audits

Purpose

External audits may be conducted by customers, by companies in charge of customers and authorities. External audits can be announced or not. Results of these audits effect the success of the unit and DO & CO globally.

Scope

This procedure applies the activities to be made in case of external audits.

Procedure

Unannounced audits by authorities or customers

- Identity card of the visitor(s) has to be shown to prove the identify of the visitor
- The unit manager or his deputy and the hygiene controller have to perform the audit with the visitor(s)
- All responsible staff have to be informed as quickly as possible
- All responsible staff have to verify in a cross check that all employees are working according to this standard and the national law
- If samples are taken by the visitors, cross checks have to be done. Samples have to be stored frozen for at least three months
- All written reports and forms have to be sent (Fax or Scan) to the Regional Hygiene Manager (RHM). Originals have to be stored in the unit for 5 years
- Impressions and results of the audit have to be reported written and formless to the Regional Hygiene Manager
- Corrective actions in case of deviations have to be planned with the RHM
- Auditors shall verify the implementation of corrective actions

Announced audits by authorities or customers

- An announced audit has to be realised by the Regional Hygiene Manager (RHM)
- As soon as the audit is announced the Food Safety Working Group have to be informed
- The audit shall be prepared thoroughly by the RHM in cooperation with the unit manager, the hygiene controller and the responsible key account manager.
- All relevant information and specific requirements of the auditing agency need to be collected prior to the audit
- Corrective actions, based on the audit results, need to be planned.
- Information to all responsible staff of the intended external audit
- Realisation of all planned corrective actions
- Realisation of an internal audit if all requirements according the standards are fulfilled
- If samples are taken by the visitors, cross checks have to be done. Samples have to be stored frozen for at least three months.
- All written reports and forms have to be sent (Fax or Scan) to the Food Safety Working Group and to the responsible Key Account Manager following a customer audit
- Results of the audit have to be reported in writing to the Food Safety Working Group and the responsible Key Account Manager following a customer audit
- Corrective actions in case of deviations have to be planned

- In case of customer audits a reply to the customer which defines all planned and already realised corrective actions has to be prepared by the RHM and has to be sent as a draft to the Food Safety Working Group and the responsible Key account manager. Replies must be sent within two days.
- In case of an external audit realised by authorities a reply has to be prepared by the RHM, which has to be released by the unit manager.
- RHM shall verify the implementation of corrective actions

Documents

- Checklists related to the restaurant standard
- Action chart

SOP 24 Analysis of Food, Water, Hands and Surfaces

Purpose

To verify the effectiveness of the control measures by use of microbiological tests.

Scope

Purchased food, in-house made processed and finished foods, water, ice, equipment and surface swab, hand swab.

Related document

Microbiological standard for ready-to eat foods.

Bacteriological standard for swab tests (hand, surface)

Laboratory test records

Procedure

Food Testing

- Foods for testing shall be, in general, high risk ready-to-eat foods. Microbiological analysis of raw high-risk foods is not considered cost effective unless special indications prevail.
- Microbiological analysis shall be carried-out for special raw products which are consumed raw or undercooked.
- Each unit shall have an appropriate sampling program for food, water, hand and swab testing.
- Methods used shall be standard methods for that particular country, or internationally accepted methods or equivalent validated method.
- Only approved external laboratories shall be used for microbiological and chemical tests.
- The microbiological guidelines for Ready-to-eat Food shown below shall be used to assess the results of food testing. However, if legally required standards are available for a country, then that country's standards must apply.
- Microbiological testing plan and results of analysis shall be documented.
- A sampling plan should be drawn up by product type detailing the number and type of microbiological tests to be carried out.
- Microbiological results should be trended by the Hygiene Controller on a monthly basis to show the number of samples vs. the number and type of out of specification results.

Recommended minimum number of foods samples for microbiological controls is as follows;

Total meal production/ day	<1000	1.000-2.500
Minimum number of food samples for examination/month	5	10

Microbiological Guidelines for Ready-to-eat Foods[1]

Category	APC[2]/g	E.coli/g	Coliforms/g	Coagulase positive Staphylo-coccus /g	Bacillus cereus/ g	Salmonella spp./ 25g	Staphylococcus aureus/g	Clost. Perfringens /g	Vibrio para-haemolyticus /25g	Campylo-bacter jejuni /25g
Cooked or ready-to-eat food to be eaten hot or cold	10^6	10	10,000	100	1000	Not detected	<100	10,000	Not detected (for seafood only)	Not detected
Ready to Eat Raw fruits and vegetables	N/A	10	N/A	100	10,000	Not detected	<100	10,000	N/A	Not detected
Fermented foods	N/A	10	10,000	100	1000	Not detected	<100	10,000	N/A	Not detected
Water and Ice[3]	N/A	0/100 ml	0/100ml	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Where legally standards are available to far a country, then that country's standard must apply.

Aerobic plate count at 30°C, 48 hours

As per guidelines for Drinking water Quality, WHO (1984)

Hand Swabs

Hand swabs must routinely be taken from all food handlers in order to ensure the effectiveness of hand washing. Records must be kept of results and corrective action must be carried out on any out of specification results. Hands must regularly be tested for *E.coli* and *Coliforms.* Any growth of *E.coli or Coliforms* indicates an out of specification. In the event of an out of specification, hands must be swabbed every week for four weeks to ensure a clear retest and training on hand hygiene given to the employee. Swaps for *Staph. aureus* can be done optionally.

Hand swab results should be trended on a quarterly basis by the Hygiene Controller to show the number of swabs taken vs. the number and type of out of specification results.

Environmental Swabbing

E.coli and *Coliforms* swabbing must also be carried out to evaluate the effectiveness of the cleaning- and disinfection procedures equipment surfaces, tables etc. If a swab is positive on *E.coli* and/or *Coliforms* immediate corrective action must be carried out, which must include recleaning of the item and reswabbing to verify the cleaning.

In addition to testing above mentioned, environmental swabs should also test for yeasts and moulds. Yeasts are a general indicator for the effectiveness of cleaning execution and physically removing dirt.

Environmental swab results should be trended on a quarterly basis to show the number of swabs taken vs. the number and type of out of specification results.

Water Sampling

To ensure the safety of water used for drinking, ice and cooking in DO & CO units, samples must be taken from all water points used for production, ice and/or drinking every six months. A sampling plan should be drawn up showing the relevant water points and when they are to be tested. The results must comply with the Microbiological Guidelines for Ready-to-Eat Foods, above, or to national guidelines where stricter.

If an out of specification result is received, the water must be resampled and where necessary removed from being used in drinking or cooking water.

Certificates of Analysis

Where suppliers are using a positive release system for their products, certificates of analysis should be sent for each batch to the Unit Hygiene Controller. This may assist in the reduction of microbiological sampling carried out by DO & CO units. Where prepared meals are bought in i.e. Kosher Meals, the supplier's microbiological results should be obtained to ensure compliance, the pasteurisation results of liquid egg should also be obtained for each batch.

Lab Audits / Accreditation

Only accredited laboratories can be used for the analysis of food, water, hand swabs and environmental swabs. It is the responsibility of the Regional Hygiene Manager to ensure that the contract laboratory is accredited. Accreditation should be confirmed through a laboratory audit to view official accreditation documentation. The laboratory should also provide evidence of their proficiency testing for all laboratory staff, and annual results viewed.

Retaining samples

For all raw consumed meals and products from the tenderloine of beef and filet of tuna retaining samples should be taken daily. The sample size should be at least 150g, the samples should be labelled with product name, date of sampling, and cook. After 2 weeks of storing in the freezer the samples should be discarded. In the event of an AFP incident these samples can be sent for microbiological analysis to establish the presence or absence of food poisoning bacteria.
Should an internal out of specification *Salmonella, E.coli* or *Coliforms* results be received, the retained sample can be tested.

Test frequency

Food	At least monthly
Hand swabs	At least quarterly
Environmental swabs	At least quarterly
Water, Ice cubes	At least twice a year

SOP 25 Complaint Management

Purpose

Structure for collecting, analysing and concentration data of internal and external complaints with the target to obtaining relevant information for improving the food safety system

Setting responsibilities and target times for customer and internal information.

Scope

All complaints obtained by the customer, the consumer, authorities and DO & CO staff related to food safety (complaints concerning chemical, physical or biological hazards).

Procedure

Following data has to be collected:

- Claims of customer, consumer or authorities regarding food safety
- Deviations as a result of microbiological examinations and test results
- Deviations which are recorded in the action chart

Complaint management

- All complaints concerning food safety issues have to be sent to the Regional Hygiene Manager (RHM) and the Food Safety Working Group immediately after receipt
- The receipt of a complaint has to be affirmed to the customer within two days by the key account manager.
- The RHM has to investigate the source of the complaint. If necessary this should be done in corporation with the unit manager, the key account and/or the Division Manager
- The results of the investigations have to be recorded by the RHM
- The results of the investigations have to be sent to the unit manager, the key account manager and the Food Safety Working Group
- The reply to the customer should be sent within 10 days beginning with the receipt of the complaint. If within this time the investigation not finalized, a report of the state of the investigations have to be sent to the customer.
- All complaints have to be stored by the food Division manager.

Food Safety Contact

Food Safety related Complaints has to be sent to the Regional Hygiene Management (RHM). E-mail addresses are:

Country	E-mail adress	Country	E-mail adress
Austria	foodsafetyAT@doco.com	Turkey	foodsafetyTR@doco.com
Germany	foodsafetyD@doco.com	United Kingdom	foodsafetyUK@doco.com
Italy	foodsafetyIT@doco.com	United States	foodsafetyUS@doco.com
Malta	foodsafetyMT@doco.com		

General Food Safety Contact is foodsafety@doco.com

Relevant Documents

Claim report

SOP 26 Continuous Improvements/Information Flow

Purpose

To improve the food safety system consistently and continuously through:

1. Evaluation of all data relevant for food safety
2. Setting measurable targets for food safety
3. Reviewing the food safety system
4. Continuous training
5. Preventive measures
6. Corrective actions
7. Information flow

Scope

Continuous improvement of the food safety system

Procedure

1. Evaluation of relevant data for food safety

- Internal audit scores
- Customer claims
- Internal claims according action chart
- AFP claims
- Microbiological test results

This data is to be collected by the Division Manager and evaluated by the Food Safety Working Group

2. Setting measurable targets for food safety

Food safety working group shall set measurable targets for the following criteria

- Internal audit scores
- Number of customer claims
- Number of AFP claims
- Microbiological test results

Each unit performance shall be assessed against the set targets.

3. Reviewing the food safety system

All relevant data for food safety (as listed above) has to be evaluated for all units. This is done by the Division Manager. Deviations are to be discussed and measurements for improvements induced.

4. Continuous training

Each unit shall implement staff training based on the training survey. Effectiveness of the training shall be consistently followed-up. Additional to the staff training, internal trainings for all DO & CO Hygiene managers should be carried out on a regular basis.

5. Preventive measures

Based on evaluation of relevant data, preventive actions for improving the system should be planned, realised, and effectively monitored. These preventive actions are planned on each level of the food safety system.

6. Corrective actions

For all deviations on SOP's of this standard corrective actions have to be planned and realised as quickly as possible. The effectiveness of the actions has to be evaluated.

7. Information Flow

For implementation and maintenance of our Food Safety System, the information flow is of major important. The following systems are essential for keeping all responsible people, Partners and staff up to date:

Newsletter

Relevant information concerning DO & CO Food Safety is sent by E-Mails. The Food Safety Working Group is collecting relevant information about new legal requirements, specific requirements and further information.

This information is addressed to all Hygiene managers, Unit management and Hygiene controllers.

Meetings

Meeting	Participants	Frequency
Hygiene meetings	Regional Hygiene Manager Hygiene Controller of a unit Unit Manager of a unit Head of Departments (if required) of a unit	Monthly
Experience Exchange Hygiene manager and Auditor	All Hygiene Managers	2 times/year
Food Safety Working Group	Food Safety Working Group	4 times/year

Reports

Report	Who	Whom	Frequency
Hygiene Controller Report (HCR)	Hygiene Controller	Regional Hygiene Manager	At least weekly
Regional Hygiene Report (RHR)	Regional Hygiene Manager	Division Manager Food Safety Working Group	At least quarterly

Relevant Documents

- Internal audit report
- AFP report
- Action chart
- Food analysis report
- Meeting report
- Food Safety Review

5. Additional Procedures (AP)

AP3 Food Safety Incident Handling

AP 3 Food Safety Incident Handling

Purpose

To handle the serious customer claims of food safety nature such as alleged food poisoning and stone, glass and metal pieces in meals.

Scope

Serious food safety related claims reported by customers.

Definitions

AFP (Alleged Food Poisoning)

Related documents

AFP checklist

Procedure

Alleged food poisoning and foreign object claims from customers are normally received by the restaurant staff. They shall inform Regional QA

Regional QA shall inform Divisional QA

Regional QA shall initiate investigation and share the collected information with Divisional QA.

If the claim is related to food poisoning, Regional QA shall complete AFP checklist and send it to Divisional QA.

Regional QA shall complete the report and submit to the person responsible to reply to the customer.

Regional QA shall send the report to all Food Safety working group members.

6. Attachments

I Definitions and Abbreviations

II DO & CO Risk Assessment

III SOP Forms

IV Shelf life of certain food items

I Definitions and Abbreviations

Issue	Definition
Abs	Absent
AFP	Alleged (non - confirmed) food poisoning
Allergen, food borne	A chemical substance in food capable of releasing an allergic reaction in the consumer
Allergens based on Reg. (EU) 2003/89	Allergens and products thereof: Cereals containing Gluten (Wheat, rye, barley oats, spelt, kamut or their hybrids strains) Crustaceans Eggs Fish Peanuts Soybean Milk (including Lactose) Nuts i.e. Almond, Hazelnut, Walnut, Cashew, Pecan nut, Brazil nut, Pistachio nut, Macadamia Nut, Queensland nut Celery Mustard Sesame seeds Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/kg expressed in SO^2
“Allergen-like” intolerance agents	Gluten, lactose
Ambient temperature	Temperature of the surrounding environment, normally synonymous with: Temperature of a room (typically a food handling area) of a catering unit or Temperature outside the unit.
Anaerobic Bacteria	Bacteria which cannot grow in the presence of oxygen but will survive in the absence of oxygen.
Analytical Method	A detailed description of the procedures to be followed in performing tests for conformity with specification.
Approved	Acceptable to the regulatory authority based on a determined conformity with principles, practices, and generally recognised standards that protects public health.
Approved Supplier	A supplier who by an approval audit has demonstrated the ability to consistently meet purchasing specifications, including food safety requirements and service delivery requirements.
Assembly	The placing of prepared food into airline dishes. Also may be referred to as “meal assembly”, “portioning”, “hot pack”, plating.
Audit (Food Safety Audit,	A systematic and independent examination to determine

Quality Audit)	Quality of control system Compliance with set critical limits and procedures
Auditor	Person performing an audit
a_w (water activity)	A measure of the free moisture in a food, is the quotient of the water vapour pressure of the substance divided by the vapour pressure of pure water at the same temperature. See also Water Activity
Bacteria	Single-cell living organisms. When present in sufficient numbers in food, some may cause food spoilage while others (food poisoning bacteria) may cause disease in the consumer.
Batch – General Definition	A batch shall consist of units of product of a single type, grade, class, size, and/or composition, manufactured, stored, handled or transported under the same conditions, and at essentially the same time.
Best before date	Date mark required on longer life foods that are not subject to microbial spoilage, e.g. frozen foods. Relates to quality rather than safety. See also: Use by date
Blast Chiller	A cooling unit used for fast chilling of cooked food after cooking has been completed and before subsequent storage or handling. The cooling medium is usually air, liquid nitrogen or liquid carbon dioxide.
Blast Freezer	A freezer unit used for fast freezing of cooked or cook-chilled food before subsequent freeze storage. The freezing medium is usually air, liquid nitrogen or liquid carbon dioxide.
BSE	Bovine Spongiform Encephalopathy.
°C	Centigrade
Calibration	Checks to ensure that critical items such as scales and thermometers are accurate and precise.
Carrier, healthy	A person who harbours and may pass on harmful bacteria without showing signs of illness themselves. (Also known as an asymptomatic excreter)
CCP	A CCP (Critical Control Point) is a step, lovation or procedure at which control can be applied and which is essential to prevent, eliminate or reduce a food safety hazard to an acceptable level
CCP Specification	A description of unit control activity of a CCP.
Centre temperature	Refers normally to temperature of food centre. Syn: Core temperature
Certificate of Analysis (COA)	Signed document showing results of analysis carried out on a product.
Chilled Foods	Perishable foods which are kept under refrigeration temperature to extend the time during which they remain wholesome.
Chilled food handling areas	Preparation areas for raw foods, preparation areas for ready-to-eat foods, pastry area, trayset areas, hot meal packing area.
Clean areas	Areas for storage, handling and transport of ready-to-eat foods and clean equipment, e.g. refrigerators for storage of ready-to-eat foods, ready-to-eat food preparation areas, clean sections of pot wash, dishwashing.

Clean processes	Storage, handling and transport of ready-to-eat foods and clean equipment.
Cleaning	Removal of food residues and dirt from surfaces, equipment and utensils.
Cold storage	Refrigeration and freezing.
Cold stores	Refrigeration and freezing rooms, cabinets and displays for storage of perishable foods.
Codex Alimentarius	The Codex Alimentarius Commission - a body set up by WHO to co-ordinate food standards internationally.
Colour Coding	Refers to the practice of affixing coloured stickers coded to the day of the week a product is produced or otherwise handled on all freshly prepared or purchased items. Colour coding may be done in accord with industry wide colour codes for the seven days of the week.
Comminuted	Reduced to small fragments such as ground meat/minced meat.
Conformity	In compliance with
Compliance	Measures and control results which satisfy legal and / or company quality system requirements.
Contaminant	Any microbiological or chemical agent, foreign matter, or other substance not intentionally added to food, which may compromise food safety or suitability.
Control, Food Safety	Monitoring + corrective action.
Controlled atmosphere packaging	A packaging method in which the composition of the atmosphere in the pack is different from air. Continuous control of that atmosphere may be maintained, such as by using oxygen scavengers or a combination of total replacement of oxygen, anaerobic food, and impermeable packaging material. See also MAP.
Convenience food	Ready-to-eat food.
Core temperature	Centre temperature of food.
Corrective action, immediate	The immediate action on food that does not comply with set critical limit of a CCP.
Corrective action, preventive	Periodical actions aimed at reducing non-compliance
Criterion	A requirement on which a judgement or decision can be based.
Critical Control Point	A point, procedure, operation or stage in the food chain, at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.
Critical Ingredient	Ingredient added to food which may cause contamination of product, high risk.
Critical item	A provision of this Code, which, if in non-compliance, is more likely than other violations to contribute to food contamination, illness, or environmental health hazard.
Critical limit	Specific limits of physical (e.g. time, temperature,…), chemical (e.g. pH) or microbiological CCP characteristics. Synonym : Criterion
Cross contamination	Spreading of microorganisms from a primary source (raw food, food handler) to a food item, either by direct contact between source and food or indirectly via surfaces, equipment, hands etc.

Crustaceans	See shellfish, crustacean
Danger Zone	The temperature range between 41°F and 140°F (5°C to 60°C). Many food poisoning as well as many food spoilage bacteria will multiply in food held within this range.
Defective Product	Product that does not fully meet the product specification as defined by the client. This invariably also includes product that does not fully meet internal product/process specification.
Detergent	Chemical facilitating removal of grease and dirt from surfaces.
Deviation	Failure to meet a critical limit.
Disinfectant, chemical	A group of approved chemicals used to reduce microbial contamination to safe levels on (previously cleaned) surfaces. Syn.: Sanitiser (U.S.A.)
Disinfection	Reduction of microbial levels on surfaces to safe levels, normally performed by use of heat or chemical disinfectants. Syn.: Sanitizing (U.S.A.)
Document Control	The controls necessary to ensure only current documents are used.
Documentation	All the written production procedures, instructions and records, quality-control procedures, and recorded test results involved in the manufacture of a product.
Dry areas	Areas the cleaning of which is performed by use of small amounts of water or no water, e.g. dry stores, corridors, tray set / Make & Pack.
Dry food	Food that has a low water activity (aw), being less than the minimum growth water activity of the micro-organisms of significance for the particular food.
Dry Ice	Carbon dioxide (CO2) solidified by great pressure or as a result of rapid evaporation of liquefied CO2. Used as a refrigerant.
Dry storage	Storage of shelf-stable foods at ambient temperatures.
E.coli 0157:H7	An E. coli strain regularly isolated from raw beef and capable of causing severe food poisoning.
EEC	See EU
EU	European Union
F	Fahrenheit
FDA	Food and Drug Administration (USA)
Final Holding	The last storage period for food products that have been prepared and packaged or packed into boarding equipment for later transport to an aircraft. Generally, the final holding area for food products is a holding refrigerator where products are thoroughly chilled prior to transport to the aircraft.
Flight Kitchen	A production kitchen facility operated by an inflight caterer for the purpose of preparing food products for boarding onto passenger aircraft.
Flow Diagram	A systematic representation of the sequence of steps or operations used in the production of manufacture of a particular product.
FMT	Five minutes training

Food contamination	The introduction to/occurrence in food of food poisoning microorganisms, spoilage microorganisms, chemicals, foreign bodies or other unwanted matter that may compromise food safety or wholesomeness.
Food contamination, chemical	Contamination of food with unwanted chemicals.
Food contamination, microbial	Contamination of food with food poisoning microorganisms or spoilage microorganisms.
Food contamination, physical	Contamination of food with unwanted foreign bodies, e.g. stones, metal objects, string, flying and crawling insects etc.
Food flow	Description of the sequence of processes a given food will pass on its way from the manufacturer to the consumer. In an airline catering context the food flow includes processes and steps before, during and after the flight catering unit.
Food Handler	Any person who directly handles packaged or unpackaged food, food equipment and utensils, or food contact surfaces and is therefore expected to comply with food hygiene requirements.
Food handler, approved	A food handler having undergone the relevant DO&CO food safety training.
Food handling areas	Preparation areas for raw foods, preparation areas for ready-to-eat foods incl. hot kitchen, cold kitchen, pastry area, bakery, tray set areas, hot meal packing area.
Food hygiene	All conditions and measures necessary to ensure the safety and suitability of food for human consumption at all stages of the food chain.
Food poisoning bacteria	A small group of bacteria that may cause disease when present in food in sufficient numbers.
Food poisoning, chemical	Food borne intoxication caused by harmful chemicals in foods.
Food poisoning, microbial	Food borne infections or intoxications, caused by food poisoning bacteria or viruses.
Food safety	Assurance that the food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use.
Food Safety Programme (FSP)	A documented (and HACCP-based) system that clearly outlines how things are done in food premises to achieve food safety.
Food Spoilage	The deterioration of food including that caused by the growth of undesirable micro-organisms, which may result in fermentation, mould growth and development of undesirable odours and flavours.
Foodborne disease	Disease, usually gastrointestinal, caused by organisms or their toxins carried in ingested food. Also commonly known as “food poisoning”.
Foodborne disease outbreak	The occurrence of two or more cases of a similar illness resulting from the ingestion of a common food.
Food-Borne Illness	Any illness, the cause of which - whether bacteria, viruses, toxins, or other contaminants - is passed to victims through the food they eat.
Food-contact surface	A surface of equipment or a utensil with which food comes into contact.
Foreign Matter	Anything physical that should not be in the product.

Food stores	Dry stores + Cold stores
Foreign body	See food contamination, physical
Freezer	A cold store (walk-in freezer, cabinet, and chest freezer) operated at a temperature that prolongs shelf life of perishable foods with months or years.
Gastro-enteritis	Illness of the digestive system, with typical symptoms diarrhoea, abdominal pain, vomiting and sometimes fever.
General hygiene	The sum of hygiene issues not influencing directly on the safety of food.
GIA	Globale Internal Audit (Audit realised by DO&CO Hygienemanager who is not responsible for the audited unit.
Good Manufacturing Practice (GMP)	That combination of manufacturing and management procedures aimed at ensuring that products are consistently manufactured to meet specifications and customer expectations.
HACCP	Hazard Analysis and Critical Control Points. A management tool providing a structured approach to identification and control of food safety hazards.
HACCP, steps	Main steps include: Identification of hazards, CCP´s, SOPs, critical limits, control, verification, review.
Hazard Analysis	The process of collecting and evaluating information on hazards and conditions leading to their presence to decide which are significant for food safety reasons and therefore should be addressed in the HACCP plan.
Hazard, chemical	The unacceptable contamination of food with potentially harmful chemicals.
Hazard Identification	The identification of known or potential health effects associated with a particular agent.
Hazard, microbial	I. Microbial pathogen related to a given food. II. The unacceptable survival, contamination (spread) or growth of pathogens in food.
Hazard, physical	The unacceptable contamination of food with potentially harmful (or unaesthetic) foreign bodies.
HC	Hygiene Controller
High-risk ready-to-eat foods	Are ready to eat foods which support rapid growth of pathogens by exposure to unsafe temperatures. Main groups of ready-to-eat high-risk foods include: Cooked poultry, eggs, meat, fish, shellfish, rice, pasta, sauces, soups Composite products which contain such foods, e.g. meals, pâtés, terrines, salads Dairy foods e.g. pasteurized milk, cream, soft cheeses. (Hard cheeses are not included in this category) Cream and custard desserts and pastries Mayonnaise and dressing with pH above 4,5 Cured, cold-smoked foods, e.g. fish, air-dried meat

	Hot-smoked food, e.g. fish and poultry
High-risk raw foods for in-house cook-chill before delivery and service.	Poultry, eggs, meat, fish, shellfish, stews, sauces, soups, pasta, rice
High susceptible population	A group of persons who are more likely than other populations to experience food-borne disease because they have low immune systems or older adults and in a facility that provides health care or assisted living services, such as a hospital or nursing home; or pre-school age children in a facility that provides custodial care, such as a day care centre.
Incubation period (of food poisoning).	The time interval from eating an unsafe food until onset of symptoms of food poisoning.
Ingredients	All materials, including raw materials, air addition, water, additives, and compounded foods, which are included in the formulation of the product.
Intrinsic	Already present.
Laboratory, approved	An internal or external food analysis laboratory approved by the DO&CO approval procedure.
Label	Any tag, brand, mark or statement in writing or any representation or design or descriptive matter on or attached to or used in connection with or accompanying and food or package.
Low –Risk Foods	Foods which do not readily support bacterial growth and which do not commonly contain microbial pathogens in harmful amounts.
Lux	A measure of light levels
Menu Cycle (Cycle Menu)	A period of time for which a particular set of menus is planned (or the menu set planned for that period). At the end of the predetermined time period, or cycle, the menu set is repeated. This cycling of menus continues until a new menu set is prepared; then it starts anew.
Microbial Barriers	Actions or conditions, such as lowering the pH or the water activity level of products, regulating the cooking or storage temperatures used, that will prevent further microbial development in the particular food product.
Microorganisms	Very small living organisms visible only under the microscope, e.g. bacteria, yeast, mould, virus
Modified atmosphere packaging (MAP)	The atmosphere of a package of food is modified so that its composition is different from air but the atmosphere may change over time due to the permeability of the packaging material or the respiration of the food. Modified atmosphere packaging includes: reduction in the proportion of oxygen, total replacement of oxygen, or an increase in the proportion of other gases such as carbon dioxide or nitrogen. See also controlled atmosphere packaging.
Molluscs	See shellfish, molluscs
Monitoring	Checking of Criteria
Outer packaging	The final packaging layer that will protect the wrapping of, or the direct contact of, any food, equipment, packaging, thing, from the introduction of contaminants.
Outsourcing	Buying goods or services from an external company.
Package	The wrapping or container used to encase a food, but does not include - a) containers used for the purpose of transporting bulk

	foods; b) pallet over wraps; c) crates and packages which do not obscure labels on the food; or d) transportation vehicles.
Parts per million	(% is parts per 100). ppm is parts per 1.000.000. Thus 1% is 10.000 ppm.
Pasteurisation	A heat process that kills most pathogenic bacteria in food and slows down the growth of others. Food is heated to a specific temperature for a specified length of time.
Pathogen	A microorganism capable of causing illness.
PHF	Potentially hazardous foods.
Pest	Animals which may contaminate foods, e.g. flying and crawling insects, rodents, birds.
Prerequisite	Procedures, including Good Manufacturing Practices, that address operational conditions providing the foundation for the HACCP system.
Preservatives	Methods of destroying, delaying or inactivating the enzymes and micro-organisms responsible for food spoilage.
Process (verb)	Includes kill, slaughter, dress, cut, extract, manufacture, pack, preserve, transport and store.
Process Specification	A document or documents identifying the raw materials, with their quantities, to be used in the manufacture of a product. Includes a description of the manufacturing operations and procedures including identification of the plant and facilities to be used, processing conditions, in-process controls, packaging materials to be used and instructions for the removal of Finished Product to storage.
Protective Clothing	Clothing provided for wear in the workplace, ie. overalls, coats, hat, gloves, shoes, boots etc. to protect food from risk of contamination.
pH value	Degree of acidity on a scale from 0 to 14 with 7 as the neutral point. Interval 0-7 is acid, while 7-14 is alkaline
Potentially hazardous foods	Foods which rapidly decrease within a short time of storage and which support rapid and progressive growth of food poisoning bacteria as well as spoilage bacteria. Potentially hazardous foods normally have a pH above 4,5 and a water activity above 0,9.
PPM	Parts per million
Preparation	Joint expression for food handling activities such as slicing, cutting, mincing, portioning, deboning, trimming, glazing, decorating, piping etc.
Pre-preparation	Handling activities on raw foods before heat treatment. Syn.: Pre-cook preparation
Probe, - thermometer	Probe, primarily for checking food core temperature. “Between-pack probe.
Processed	Ready to eat.
Produce	American term for raw (unwashed) vegetables and fruit.
Quality Assurance	Activities undertaken by a firm or organisation to control the quality level of a product or service provided or received. Quality assurance activities are designed to ensure that the performance

	is in accord with product or service quality standards established at the beginning of the relationship.
QC	Quality Control
Quarantine	The status of any materials or product set aside while awaiting a decision on its suitability for its intended use or sale.
Rating score	Result on a checklist of an audit, verification or inspection.
Raw food	Food which normally needs to be cooked prior service, e.g. raw meat, raw poultry, raw fish, raw shellfish, some raw unwashed vegetables.
Raw high-risk foods	Are those foods which regularly harbour microbiological pathogens, which must be destroyed by cooking or wash/disinfection (e.g. organically grown vegetables for raw service). Raw high-risk foods include: Raw foods of animal origin (poultry, raw eggs, meats, fish, shellfish) for cooking. Raw, organically grown vegetables for wash and disinfection.
Raw Material	Any material, ingredient, starting material, semi-prepared or intermediate material, packaging material, etc., used by the manufacturer for the production of a Finished Product.
Ready-to-eat food	The expression covers all foods that do not need any heat treatment or cleaning (vegetables) prior to service. Syn: Precooked foods, Processed foods R-t-e foods may need preparation / handling prior to eating such as cutting, slicing, mincing, whipping, mixing, etc. Examples include dairy products, cooked meats / poultry / fish / shellfish, delicatessen items, washed raw vegetables, smoked or marinated foods, bought-in meals and desserts etc.
Receiving control	Checking quality criteria of a bought-in food at receiving point, normally including parameters such as food temperature, labelling, volume / weight, packaging etc.
Reduced oxygen packaging	The reduction of the amount of oxygen in a package by removing oxygen; displacing oxygen and replacing it with another gas or combination of gases; or otherwise controlling the oxygen content to a level below that normally found in the surrounding 21% oxygen atmosphere.
Refrigerator	A cold store (cold room / walk-in refrigerator, cabinet or display) operated at a temperature which prolongs shelf-life of perishable foods with a few days or weeks.
Ready-to-eat high risk foods	See Definition “High-risk ready-to-eat foods”
RHM	Regional Hygiene Manager
RIA	Regional Internal Audit: Audit realised by the Regional Hygiene Manager
Risk	A function of the probability of an adverse effect and the severity of that effect, consequential to a hazard(s) in food. Risk of a hazard may in a simple way be expressed as the probability with which a hazard may occur.
Risk Analysis	A process consisting of three components: risk assessment, risk management and risk communication.

Risk Assessment	The scientific evaluation of known or potential adverse health effects resulting from human exposure to foodborne hazards.
Risk Characterisation	Integration of hazard identification, hazard characterisation and exposure assessment into an estimation of the adverse effects likely to occur in a given population, including attendant uncertainties.
Risk factor	A risk factor is anything statistically shown to have a relationship with the incidence of a disease, however it does not necessarily infer cause and effect.
Risk Management	The process of weighing policy alternatives to accept, minimise or reduce assessed risks and to select and implement appropriate options.
Safe and suitable food	For the purposes of the Food Safety Standards, food is not safe if it would be likely to cause physical harm to a person who might later consume it, assuming it was: a) after that time and before being consumed by the person, properly subjected to all processes (if any) that are relevant to its reasonable intended use; and b) consumed by the person according to its reasonable intended use.
Safe food	Food that has been produced, stored and distributed under safe conditions and which does not contain harmful amounts of microorganisms, chemicals and foreign bodies.
Sanitary design	Designed and constructed so that an area, conveyance, or equipment: meets the requirements appropriate to its use; can be readily maintained, cleaned, sanitised and sterilised where required to ensure that it is free from contaminants and vermin; and in relation to any equipment or access way in any food area, also means that the equipment or access way is easily accessible for maintenance, cleaning, operation, checking and inspection; and does not allow contaminants to come in contact with any food or other equipment; and precludes the harbouring of accumulation of any contaminants or vermin.
Sanitation	The application of cumulative heat or chemicals on cleaned food-contact surfaces that, when evaluated for efficacy, is sufficient to yield a reduction of 5 logs, which is equal to a 99.999% reduction, of representative disease micro-organisms of public health importance.
Sanitise	The process of freeing a surface or object from dirt and micro-organisms.
Sanitiser	A substance that reduces the microbial contamination on inanimate surfaces to levels that are safe from a public health stand point. The European equivalent to the US expression sanitiser is disinfectant.
Sealed	Free of cracks or other openings that allow the entry or passage of moisture.
Segregation	Separation of raw food and ready-to-eat food in storage and handling.
Separate by distance	To separate to such an extent so as to avoid any possible contact, splash, contamination, etc., between specific functions, processes

	or personnel.
Separate by time	To end one function or process prior to starting a different function or process, with a cleaning operation in between.
Separate physically	To separate by floor to ceiling solid walls and doors, or to fully protect product by pipelines, enclosed vats, etc.
Severity	The seriousness of the effect(s) of a hazard.
Sewage	Liquid waste containing animal or vegetable matter in suspension or solution and may include liquids containing chemicals in solution.
Shellfish, crustacean	Shrimp, prawns, crabs, lobsters, crayfish
Shelf life	Period of time during which a food remains fit for consumption if maintained throughout the period under controlled conditions pre-designated by the manufacturer.
Shellfish, molluscan	Mussels, scallops, clams, oysters, abalone
Short Haul Flight	Less than 4 hours with the need of a second service
Single-use item	An instrument, apparatus, utensil or other thing intended by the manufacturer to only be used once in connection with food handling, and includes disposable gloves.
Smooth	A food-contact surface having a surface free of pits and inclusions with a cleanability equal to or exceeding that of (100 grit) number 3 stainless steel; A non food-contact surface of equipment having a surface equal to that of commercial grade hot-rolled steel free of visible scale; and c) A floor, wall, or ceiling having an even or level surface with no roughness or projections that render it difficult to clean
Soap	See detergent.
Sous vide	“Cooking in the bag” -concept of ready-to-eat food production with long shelf-life of the cooked product under low refrigeration temperature in vacuum bags. Official definition: Cooking of raw foods under controlled temperature / time conditions in heat-stable vacuum bags.
SOP	Standard Operating Procedure. A detailed description of how a particular task is to be carried out. See also GMP.
Special Meals	Meals prepared especially for a passenger’s diet, taste or religious preference and prepared under the airline’s specifications. International special meal codes and guidelines have been agreed upon by the airline industry in an effort to improve the consistency of special meals for passengers.
Specification	A document giving a description of material, machinery, equipment, process or product in terms of its required properties or performance. Where quantitative requirements are stated, they are either in terms of limits or in terms of standards within permitted tolerances.
SPML	Special meal.
Spore, bacterial	A survival body. Formed by only a few food poisoning bacterial types, i.e. *Bacillus cereus, Clostridium perfringens* and *Cl. Botulinum*.
Spoilage	A process in food which makes the food unsuitable for human consumption through incorrect or prolonged storage.

Supplier, approved	A food supplier approved by the DO&CO Supplier Approval Procedure.
Supplier, divisional	An approve supplier whose products are purchased and used by units across one or several divisions.
Supplier, country	An approve supplier whose products are purchased and used by units across one or several countries.
Supplier, global	The former term global supplier is no longer commonly used, as only 1 or 2 true global suppliers remain.
Supplier, local	An approve supplier whose products are purchased and used by one or several units in a city or a narrow geographical area.
Spoilage	A process in food which makes the food unsuitable for human consumption through incorrect or prolonged storage.
Sterilisation	The process of destroying micro-organisms.
Temperature measuring device	A thermometer, thermocouple, thermistor, or other device that indicates the temperature of food, air, or water.
Thawing	A controlled process for defrosting frozen products.
Thermolabel	Temperature sensitive label used for monitoring operating time / temperature pasteurisation capacity of dishwashers.
Thermometer, probe	A thermometer equipped with a metal probe for checking temperature inside food
Thermometer, infrared	A thermometer equipped with an infrared device for checking food surface temperature. An infrared thermometer may be delivered with or without laser “tracer”.
Thermometer, between bags	A thermometer designed for checking temperature between food bags without penetrating bags.
Traceability	Ability to trace and follow a food, feed, food producing animal or substance intended to be or expected to be incorporated into food or feed, through all stages of production, processing and distribution
Unclean areas	Areas for storage, handling and transport of raw foods, unclean equipment and waste, e.g. refrigerators for storage of raw foods, raw food preparation areas, unclean sections of pot wash, dishwash, waste collection station.
Unclean processes	Storage, handling and transport of raw foods, unclean equipment and waste.
Use by date	Date mark on perishable pre-packed foods. In most countries it is illegal to sell foods after the Use by date.
Utensil	A food-contact implement or container used in the storage preparation, transportation, dispensing or service of food, such as kitchenware or tableware that is multiuse, single-service, or single-use; gloves used in contact with food; food temperature measuring devices.
Vacuum packaging	Air is removed from a package of food and the package is hermetically sealed so that a vacuum remains inside the package, such as sous vide.
Validation	Obtaining evidence that the elements of the HACCP plan are effective.
Virus, food borne	A group of microorganisms, which may be transmitted by food and may cause illness, e.g. Norwalk virus. Virus may survive, but not

	multiply in food.
Verification	Check of unit monitoring results by an external or internal auditor in order to assess / verify quality of unit control.
Water Activity	The relationship between the moisture content of the product and the relative humidity of the air surrounding it. Must not be confused with water content
Water Activity Level	A factor which represents a ratio of the vapour pressure of food to that of pure water. It indicates how much available water is in a product that micro-organisms can use for growth. Products that have very low water activity levels, or are very dry, will not support microbial growth.
Water, mineral-	Mineral contents may be adjusted. Does not have to be tapped at the well.
Water, natural mineral-	Min. 500mg natural mineral salts per litre. Must be tapped at the well and not be transported in bulk. Carbon dioxide may be added.
Water, well-	As for natural mineral water, but mineral content may be lower than 500 mg / l.
Wet areas	Areas cleaned by wet cleaning procedures, e.g. preparation areas, kitchens, pastry section, bakery, dishwash, pot wash, waste collection station. Walk-in refrigerators may be wet cleaned or dry cleaned.
%	Percent.
°C	Degrees Celsius
°F	Degrees Fahrenheit
cfu/g	Colony forming units per gram
mg/L	Milligrams per litre, which is the metric equivalent of parts per million (ppm)
ppm	Parts per million