

HYGIENE AND FOOD SAFETY IN THE HANDLING AND PRESERVATION OF FOOD COVID-19



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| PROLOGUE |

To support hotel and restaurant professionals with their hygiene and safety practices in the COVID-19 situation, ARAVEN has prepared five guides that focus on the importance of hygiene and food safety in this sector..

- Cleaning and disinfection of food containers and utensils.
- Hygiene and food safety in the handling and preservation of vegetables.
- Hygiene and food safety in the handling and preservation of meat and fish (animal proteins).
- Hygiene and food safety in the handling and preservation of dry foods.
- Hygiene and food safety in the preservation of prepared foods.

Professionals from BCC Innovation, the technology center of the Basque Culinary Center have taken part in preparing the contents of these guides. This project in addition to Araven's sponsorship of the "Food hygiene and safety guidelines" published by the Basque Culinary Center and Euro-Toques.

This initiative clearly highlights the commitment of both institutions to help catering businesses improve their health and safety measures, by proposing general and specific hygiene and food safety measures applicable in restaurants that will help them regain the confidence and trust of their customers..

1

FOOD HYGIENE AND FOOD SAFETY

The foodservice industry, just like the rest of the food industry, must apply food safety management systems that adhere to the principles of Hazard Analysis and Critical Control Points (HACCP) to manage the hazards that can affect food safety and to avoid food contamination. For this purpose following the General Food Hygiene Principles established by the Codex Alimentarius⁽¹⁾ for this purpose, it is recommended to follow the general food, which includes implementing good hygiene programmes, cleanliness and sanitizing practices, defining food preparation areas, control of suppliers, storage, distribution and transport.

Food hygiene and safety is one of the top priorities in restaurants.

Food safety does not only depend on the state of the food and type of process it undergoes. The materials that come into contact with food also play an important role.

The products made by Araven are designed according to the recommendations laid down in the International Code of Good Food Hygiene and Health Practices (Codex Alimentarius).

2

FOOD SAFETY AND COVID-19

To prevent infections and intoxications in the current situation of maximum hygiene requirements due to COVID-19, it is necessary to reassess the risks in order to identify and incorporate preventive measures and additional control points to increase food safety.

Throughout the food chain foodstuffs undergo different preparation processes and situations where there is a risk of contamination. To avoid food contamination, it is absolutely essential to control the risks affecting food safety and to manage food correctly to minimize the majority of these risks.

“
Hygiene measures must be stepped up in all food handling phases.
”

Food safety must be guaranteed throughout the entire food chain. In the HORECA sector the following phases in managing and treating foods in the kitchen are identified:



Prior to these four phases, food service establishments must apply the necessary measures to prevent workers becoming infected with COVID-19, to avoid exposure and the spread of the virus, by reinforcing, in particular, food handling hygiene practices. ⁽¹⁾

The following guide focuses on hygiene and food safety measures relating to the handling and preservation of vegetables.

Hygiene measures are the best barrier against the spread of coronavirus.

ARAVEN's products enable foods to be preserved with the maximum hygiene and food safety guarantees, preventing their from spoilage, and protecting them from cross-contamination.

3

CAN CORONAVIRUS BE TRANSMITTED BY FOODS?

COVID-19 is a respiratory disease mainly spread by contact between people and via direct contact of the nose, mouth or eyes with the micro-droplets expelled when the person infected coughs or sneezes. A person can become infected if, after touching a contaminated surface or object or the hand of an infected person, they then touch their mouth, nose or eyes. ⁽²⁾

To date it has not been shown that the viruses that cause respiratory diseases such as COVID-19 **can be transmitted via foods or food containers**, since they need an animal or human host to multiply. ⁽³⁾



There is not at present any proof of the transmission of coronavirus via food.

CLEANING AND DISINFECTING UTENSILS AND SURFACES IN RESTAURANTS

1

WHAT ARE THE SPECIFIC HAZARDS IN THE CATERING SECTOR?

Carriers of the SARS-CoV-2 virus, known colloquially as “coronavirus” **can infect other people via respiratory secretions** (coughs, sneezes or droplets expelled while speaking (Flügge droplets). Furthermore, **these droplets can remain on surfaces** and any contact with them can cause **new infections**. In the specific case of restaurants these surfaces can be utensils, work surfaces or the foods themselves.

The persistence of the virus on a surface depends on the humidity and temperature conditions as well as the nature of the surface. At higher temperatures (30°C / 86°F and above) its persistence is lower. A recent study on the survival of the virus, carried out in a laboratory with controlled relative humidity and temperature, has shown that **the survival period can be up to 72 hours on plastic and stainless steel, 4 hours on copper and 24 hours on cardboard**.⁽⁴⁾



2

WHAT PREVENTIVE MEASURES CAN BE TAKEN IN RESTAURANTS?

To avoid the transmission of the coronavirus in catering services we must:

- » Reinforce hygiene practices among staff.
- » Step up cleaning and disinfecting processes of the facilities, equipment and surfaces, utensils, and food containers.
- » Protect kitchenware and kitchen utensils from environmental exposure.
- » Avoid unnecessary packaging materials (plastic bags, cardboard boxes entering restaurant facilities (storage rooms, kitchen, cold chambers).



3

HOW TO CLEAN AND DISINFECT SURFACES?

The World Health Organization reports that deep cleaning of environmental surfaces with **water and detergent and the application of commonly used disinfectants** (such as sodium hypochlorite: bleach) are **sufficiently effective procedures**.

Adequate cleaning and disinfecting of surfaces prevents the spread of coronavirus between people.



“

For the disinfecting process to be effective, the surface must be **CLEANED** first with water and detergent and then **DISINFECTED**.

”



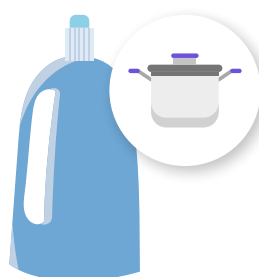
Disinfection of surfaces can be carried out with different products. To disinfect surfaces effectively you can use: 62-71% ethanol, 0.5% hydrogen peroxide, 0.1% sodium hypochlorite (bleach) for 1 minute. Other biocidal agents such as 0.05-0.2% benzalkonium chloride or 0.02% chlorhexadine diglutonate are less effective .⁽⁵⁾

In the case of **stainless steel surfaces** such as tables, supports and machinery, the recommendation is to use **chlorine-free disinfectants**, such as peroxide or phenol disinfectants or any of the virucide products since bleach attacks this material when the surface has a scratch or crack.

PRECAUTIONS to be taken when disinfecting:

Always use **authorised disinfectants**:⁽⁶⁾

- » Choose the type of disinfectant according to the type of surface to be disinfected. (Note: There are disinfectants for environmental use, for the food industry or human hygiene).
- » For surfaces that are going to come into contact with food, use specific disinfectants for food-contact surfaces and materials.⁽⁶⁾
- » To ensure effective disinfection **follow the manufacturer's indications** (always keep technical data sheets).
- » **Do not mix disinfectants** as this may result in toxic effects.



PROPER USE OF BLEACH

When using bleach (sodium hypochlorite) as a disinfectant it is advisable to:

- ✓ Dilute bleach in cold water (hot water reduces its effectiveness).
- ✓ Prepare the solution every day to ensure its disinfecting power.
- ✓ Surfaces should be rinsed with clean water after a sufficient contact time.
- ✓ Do not mix bleach with other disinfectants such as ammonia as this causes toxic fumes.
- ✓ Use 0.1% concentrations of bleach to obtain a disinfecting effect:

PRODUCT	INSTRUCTIONS	REMARKS
50 g/l (0.10lb/qt) commercial bleach	Add 20 ml (0.7oz/qt) of bleach to 1 litre of water	One tablespoon is approximately 15 - 20 ml (0.5 - 0.7 oz)
40 g/l (0.09lb/qt) commercial bleach	Add 25 ml (0.85oz/qt) of bleach to 1 litre of water	

RECOMMENDATIONS regarding cleaning materials:

Whenever possible use **disposable cleaning materials** and avoid cleaning systems that employ fabrics or absorbent materials such fabric wiping or cleaning cloths.

4

HOW TO CLEAN AND DISINFECT KITCHEN UTENSILS

All **utensils and equipment** used in food storage and handling zones that can come into contact with food **must be made of materials that do not transfer toxic substances, odours or tastes, are not absorbent, are resistant to corrosion and can withstand repeated cleaning and disinfecting operations**. Surfaces must be smooth and have no cracks or dints.

Check the correct functioning of the dishwasher, particularly washing temperatures, as well as the correct doses of chemical cleaning and disinfecting products. Kitchen utensils should preferably be washed in the dishwasher at rinsing cycles that reach a temperature of 80 °C / 176 °F .⁽⁷⁾

If hand washing is required, follow the usual steps (washing and rinsing) and dry with disposable paper towels.⁽⁸⁾

All tableware, cutlery, glassware, and kitchen utensils should be washed preferably in the dishwasher, including items that have not been used (they may have been in contact with a user).



PLASTIC, GLASS AND METAL UTENSILS:

Food safety authorities advise against the use of disinfectants for cleaning glass and plastic containers and cans, since some are porous and allow the disinfectant to pass through them, which can contaminate food and pose a potential hazard for health. Soap and water are recommended to clean this type of material. ⁽⁹⁾



Disposable food packaging should not be reused as food containers.



Araven's products help to implement Correct Hygiene Practices in Foodservice establishments, encouraging prevention, reduction, or elimination of possible hazards during different phases of food preparation and handling. They are designed with the aim of minimising the risk of food product contamination. Furthermore, work tools intended for food contact are made with materials resistant to corrosion and easy to clean and disinfect.

5

HOW TO PREVENT KITCHEN UTENSILS FROM BECOMING CONTAMINATED

To prevent/avoid contamination by coronavirus **PROTECT** the following items against **environmental exposure**⁽¹⁰⁾:

- ✓ All those utensils that are going to come into contact with foods that are not going to be heat treated.
- ✓ Kitchenware (tableware/cutlery) and kitchen utensils when not in use. If this is not possible, always clean them before use, preferably in the dishwasher or by other effective means.

Types of kitchen utensils:

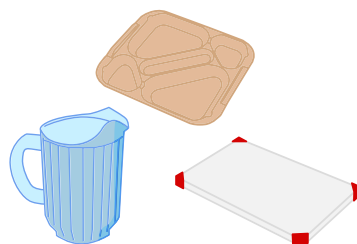
Small sized:

- » Tweezers, cutlery, knives, whisks, pastry cutters, gastronorms, peelers, etc.
- » Scrapers, whisks, spatulas, funnels, silicon spatulas, etc.
- » Small bowls, jars, tableware, etc.



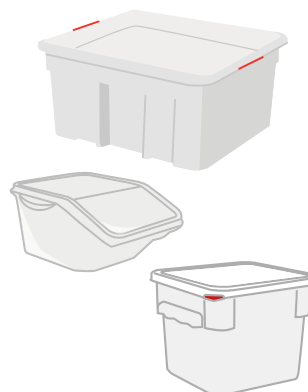
Medium sized:

- » Pots, frying pans, trays, ladles, skimmers, colanders, graters, gastronorms, racks, etc.
- » Bowls, cutting boards, jugs, plates, serving dishes, etc.



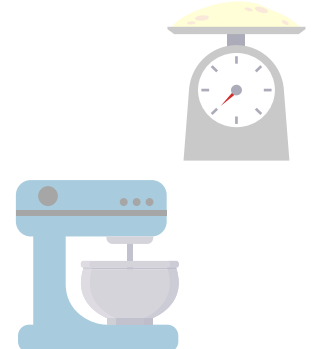
Large sized:

- » Pans, gastronorm trays, containers, etc.



Small equipment:

- » Weighing scales, thermometers, kitchen robots, kneaders, kitchen robot accessories, etc.



HYGIENE AND FOOD SAFETY IN THE HANDLING AND PRESERVATION OF VEGETABLES

1

HYGIENE MEASURES WHEN FRESH PRODUCE ARE RECEIVED

WHAT ARE THE RISKS WHEN YOU RECEIVE VEGETABLES?

“

There is no evidence that the consumption of contaminated food causes infection.

”



However, handlers who are coronavirus carriers may deposit droplets of saliva (Flügge droplets) on the surface of food or food containers which, in contact with other handlers may cause the spread of COVID-19.



Reception of goods



Food storage and preservation



Food handling and preparation

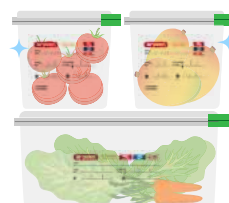


Food presentation or serving

HYGIENE MEASURES WHEN FOOD IS RECEIVED

When receiving a delivery of raw materials at restaurant facilities, the following is recommended ⁽¹¹⁾:

- » **Designate a specific zone for exchanging goods.** There should be an area set aside for receiving/returning goods (specific zone, table, marked floor area...) located near to the goods entrance door, separated physically or provisionally from the rest of the areas.
- » **Remove the packaging** of the raw materials received (cardboard box, plastic bag) whether or not the food is packed inside. This packaging is the outermost wrapping, used during distribution and transport.
- » **Packaging that cannot be removed** and that has been in contact with the exterior during the delivery process **should be disinfected.**
- » In the case of fresh produce, such as vegetables, **swap the supplier's container for a clean, disinfected container in the reception zone.**



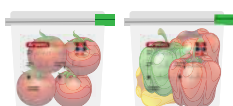
- » Delivery notes should be left on the table to avoid contact with the supplier and should always remain in this reception zone. All devices that are used (thermometers, pens, etc.) should always be used preferably by the same person. If they are shared, they should be desinfected after each use.
- » After receiving and/or handling packages/orders **the zone should be cleaned and disinfected and staff must wash their hands with a disinfectant soap and water.**

OTHER CONSIDERATIONS:

- » The establishment must have a **supplier control plan** to guarantee product quality.
- » All foods received must be checked to ensure that the containers and packaging are intact, the food temperature is correct, food labeling and shelf-life is correct, it has been transported in adequate hygiene conditions and that the delivery notes are correct.
- » Before the products received are changed to the establishment's own **containers**, check that they are **clean and have been disinfected**.
- » Choose a container with sufficient capacity to store vegetables correctly. Bear in mind the type of vegetable to estimate the volume that a certain amount of that product will occupy (See Table).

VEGETALES

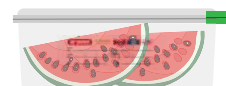
** Guideline weight-volume conversion table for various vegetables.*



Medium size

- Apples, carrots, tomatoes, avocados, oranges, etc.

1kg → 2,3 litres
2.2 lb → 2.4qt



Large size

- Watermelon, papaya, melon, pineapple, etc.

1kg → 2,2 litres
2.2 lb → 2.3qt



Whole leafy vegetables

- Lettuce, escarole, chard, cabbage, etc.

1kg → 4,5 litres
2.2 lb → 4.7qt



- » **Mark** the containers used for preserving and storing foods with the necessary information to enable all the products to be **traceable**.



ARAVEN containers have a permanent traceability label integrated in the container to identify the contents and keep track of information relating to their origin.

You can record the origin of the food, type of product, preparation, preservation conditions, best-before date, etc.

2 WASHING AND DISINFECTING VEGETABLES

Fruit and vegetables must be washed and disinfected to reduce or eliminate the microorganisms and any other possible pollutants on them.

"Dirty" (non-decontaminated) foods and "clean" (decontaminated) foods must be handled in different zones to prevent cross contaminations. After receiving a delivery of fresh vegetables, they must be washed and then disinfected.

The purpose of washing vegetables is to get rid of any soil, stones, insects, pesticides, etc. that may remain on the vegetables.



THE RECOMMENDATIONS FOR WASHING VEGETABLES ARE ⁽¹²⁾



- » Wash fruit and vegetables under cold running water, especially those that are going to be eaten raw and unpeeled.
- » Remove any parts in poor condition.
- » Do not handle washed fruits and vegetables on the same surface as those that are unwashed.
- » Use specific brushes to clean foods with tough skins or certain vegetables such as cucumber, courgettes...
- » Wash brushes (preferably in the dishwasher at a minimum temperature of 80°C / 176°F).
- » The aim of disinfecting vegetables in restaurants is to eliminate pathogenic microorganisms such as *Salmonella* spp., *Listeria monocytogenes*, *Escherichia coli*, parasites' eggs or the presence of viruses on the surface.



THE RECOMMENDATIONS FOR DISINFECTING VEGETABLES ARE

- » Use products specifically for disinfecting vegetables or sodium hypochlorite (bleach) "food grade" or fit for disinfecting drinking water (this should be indicated on the label).
- » Prepare a solution of the disinfectant according to the specifications given on the product's technical instructions sheet (dose and application time).
- » After the application time of the disinfectant solution has passed, rinse the product thoroughly under cold running water.
- » Drain the vegetables to get rid of most of the water.
- » After disinfecting vegetables, consume immediately or store them in clean, disinfected containers. Refrigeration is essential to maintain the microbiological quality of clean fruits and vegetables. ⁽³⁾

PRECAUTIONS when preparing the disinfectant solution with sodium hypochlorite (bleach): ⁽¹²⁾

- » Use food grade bleach suitable for disinfecting drinking water.
- » Prepare the disinfectant solution with cold water. Hot water reduces the disinfecting effect. Chlorine acts effectively when the water temperature is between 8°C and 12°C; it must not be above 15°C.
- » Prepare a hypochlorite solution with a concentration of 70mg/l, it must never be more than 80 mg/l. The recommendation is to add 1.8 ml of bleach (40 g/l concentration) to prepare a litre of solution. (See Annex)
- » Submerge vegetables for 5 minutes. Do not exceed this time.
- » Move the fruit and vegetables around in the solution to improve the disinfecting effect of the sodium hypochlorite.
- » If using automatic bleach dispensers, check every day that the device is working properly by testing the chlorine concentration using test strips or equivalent measuring kits.
- » If you use solid chlorine tablets they should be totally dissolved in water before putting the product into the solution.

3

HYGIENE MEASURES IN THE STORAGE AND PRESERVATION OF VEGETABLES

After vegetables have been harvested, they continue to breathe and hence tend to deteriorate relatively quickly. Preservation of vegetables requires special attention as they are a food group that tends to be eaten raw making it very important to maintain the maximum level of quality and food safety possible.

Fresh fruits and vegetables have a high water content. This characteristic is crucial in preserving them correctly since over time they release this water in the form of moisture which can condensate on the walls and bottom of food containers causing mould to appear which in turn could give rise to a process of rotting.

To prevent this spoilage, containers intended for storing this kind of foodstuff should not have airtight seals and should have ventilation zones that allow water to evaporate without forming condensation.



“

Placing ARAVEN drain trays at the bottom of the container also allows air to flow around the food and prevents condensation and water accumulation from forming in this bottom area.

”

Inadequate storage leads to spoilage and reduces the shelf life of vegetables.





Vegetables, whether refrigerated/frozen or at room temperature, should be managed on a FIFO (First in, First out) basis, and kept separate in the right containers made of materials suitable for food contact.



ARAVEN has containers with systems that help to ensure the orderly rotation of foods (FIFO).



Containers for storing food:

- ✓ Must be made of materials suitable for food contact.
- ✓ Must be easy to clean and disinfect at high temperatures (>80°C / 176°F)
- ✓ Must make any dirt that may appear visible
- ✓ Must not have any gaps or recesses where dirt could become lodged
- ✓ Must allow food to be protected with lids
- ✓ Must enable the products inside to be identified with sufficient information to allow their traceability.



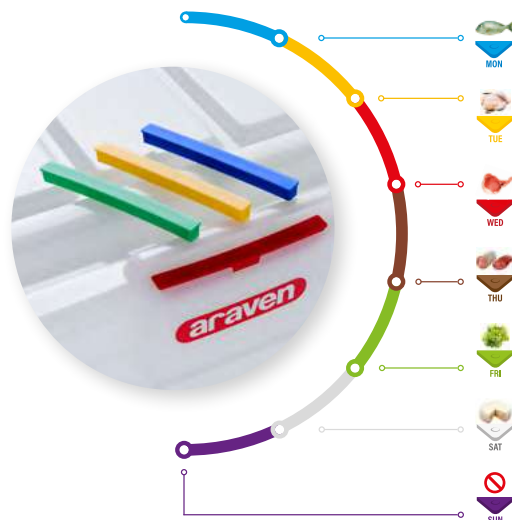
ARAVEN storage containers are essential items in the kitchen; the properties of good food can be spoiled if it is not stored in the right container.



Correct storage and preservation of food serves a dual purpose:

- ✓ Ensuring optimal hygiene and food safety quality
- ✓ Reducing the quantity of waste due to food spoilage.

ARAVEN containers, thanks to their colour identification system (ColorClip), **help prevent cross-contamination**, ensuring that the contents of a container are always of the same type. For vegetables they will be green.



4 HYGIENE MEASURES WHEN HANDLING VEGETABLES

If vegetables are going to be consumed raw, without any heat treatment, ensure correct health and hygiene practices are in place to control and reduce the risk of contamination.



Coronavirus is not a foodborne disease,
but cross-contamination can occur.

Preventive measures during the handling process in kitchens: ⁽¹⁰⁾

- ✓ Food handling staff must use a face mask when handling food that is served raw and when plating up food. Also, when the activity he/she is carrying out does not allow physical distancing between other people, a face mask must be worn.
- ✓ Protect all utensils that are going to be in contact with raw foods, that are not going to undergo heat treatment, from environmental exposure.
- ✓ Protect all foods until they are processed.
- ✓ Once cooked, protect foods until plating up.
- ✓ Protect cold dishes using lids, plate covers, transparent film, aluminium foil, etc. and keep them refrigerated until they are served.



5 WHERE TO PLACE VEGETABLES IN STORAGE SPACES

Optimal **organisation of cold rooms**, placing foods on the correct shelves according to their type and the group they belong to, not only serves the purpose of **improving productivity in the kitchen**, but it also **reduces health and hygiene risks**.

It is **essential** always **to separate cooked foods or those ready for consumption from those that are still raw** and, whenever possible **to designate zones according to the type of food, in separate refrigeration rooms**.

We recommend different cold rooms for different food types, if this is not possible then raw vegetables and fruits intended for preparation using a **heat treatment** (roasting, boiling, ...) should be placed on the lower shelves of cold rooms.

Fruits and vegetables that are intended for raw consumption: lettuce, tomatoes, carrots, should be kept **in an area of the cold room that is separated from the rest**, and not placed on the same shelf as other types of foodstuffs. If this is not possible, they should be properly lidded and protected **on top shelves**.



TOP SHELVES:

Fruits and vegetables that are intended for **raw consumption**



LOWER SHELVES:

raw vegetables and fruits intended for preparation using a **heat treatment**



- ANNEX -

Recommendation for disinfecting fruits and vegetables with a 0.007% (70 mg/l) concentration of sodium hypochlorite.

Table: Volume of sodium hypochlorite (ml) required to reach the target concentration of 0.007% using commercial bleaches of various concentrations.

Final concentration of 0.007%

Volume of water (l. - qt.)	Concentration of hypochlorite (g/l)				
	35	40	45	50	55
1	2	1,8	1,6	1,4	1,3
2	4	3	3,1	2,8	2,6
3	6	5,5	4,7	4,2	3,9
4	8	7	6,2	5,6	5,5
5	10	8,5	7,8	7	6,5
10	20	18	16	14	13
15	30	26	23	21	20
20	40	35	31	28	26

HYGIENE AND FOOD SAFETY IN THE HANDLING AND PRESERVATION OF MEAT AND FISH

1

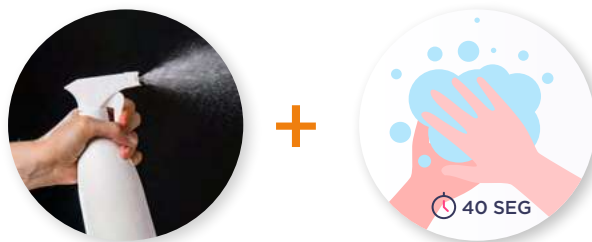
HYGIENE MEASURES WHEN FOOD IS RECEIVED

It is important to ensure that all raw materials received comply with the health and quality requirements laid down to prevent foodstuffs endangering consumers' health. For this purpose, the provisions set out in the Hazard Analysis and Critical Control Points (HACCP) system must be followed.



When receiving a delivery of raw materials at restaurant facilities, the following is recommended ⁽¹¹⁾:

- » **Designate a specific zone for exchanging goods.** There should be an area set aside for receiving/returning goods (specific zone, table, marked floor area...) located near to the goods entrance door, separated physically or provisionally from the rest of the establishment.
- » **Remove the packaging** of the raw materials received (cardboard box, plastic bag) whether or not the food is packed inside. This packaging is the outermost wrapping, used during distribution and transport.
- » **Packaging that cannot be removed** and that has been in contact with the exterior during the delivery process **should be disinfected.**
- » Delivery notes should be left on the table to avoid contact with the supplier and should always remain in this reception zone.
- » All devices that are used (thermometers, pens, etc.) should always be used preferably by the same person. If they are shared, they should be disinfected after each use.
- » After receiving and/or handling packages/orders **the zone should be cleaned and disinfected and staff must wash their hands with a disinfectant soap and water.**



OTHER CONSIDERATIONS:

- » The establishment must have a **supplier control plan** to guarantee product quality.
- » All foods received must be checked to ensure that the containers and packaging are intact, the food temperature is correct, food labeling and shelf-life is correct, it has been transported in adequate hygiene conditions and that the delivery notes are correct.
- » Before the products received are placed in the establishment's own **containers**, check that they are **clean and have been disinfected.**
- » **Mark** the containers used for preserving and storing foods with the necessary information to enable all the products to be **traceable.**



ARAVEN containers have a permanent traceability label integrated in the container to identify the contents and keep track of information related to their origin.

You can record the origin of the food, type of product, preparation, preservation conditions, best-before date, etc.

When receiving delivery of meat and fish it is essential to ensure that they are received at the correct temperature (See Annex).⁽¹³⁾

Foodstuffs are mainly altered by the action of bacteria which are very active at room temperature. Cold does not destroy microorganisms but it does slow down or stop their development.

After receiving raw foodstuffs, it is essential **to maintain the cold chain** by transferring them to cold room as quickly as possible.



2 HYGIENE MEASURES FOR PRESERVING MEAT AND FISH

Correct storage and preservation of food serves a dual purpose:

1. Ensuring optimal hygiene and food safety quality.
2. Reducing the quantity of waste due to food spoilage.

Correct preservation of protein-rich foods is essential for several reasons:

- ✓ It guarantees hygiene and food safety and the health of diners as well as compliance with regulations. **It prevents the risk of bacterial contamination**, which in the case of proteins can be serious.
- ✓ It **reduces wastage** of this type of food that, in general, is the most expensive food kept in store in a kitchen.
- ✓ It guarantees the quality of preparations and the end result. **It maintains all the organoleptic properties of the food** (colour, taste, texture...) so that after preparation it is in perfect conditions for serving to customers.



Meat and fish must be stored in cold rooms (chilling or freezing). Ideal temperatures for preserving food depend on the type of product or preparation (See Annex).⁽¹³⁾

- » **Cold rooms should be at temperature of between 0 and 8 °C (46 °F)**, depending on the type of product. Ideal refrigerating temperatures are between 0 °C and +4 °C (39 °F), but a cold room in which various products are stored should kept at the temperature of the product that requires the coldest temperature.



- » **Freezer chambers must be at a temperature of below -18 °C (-4 °F).**



Certain measures to be taken into account for cold storage/freezer rooms:

- » The interior of the storage rooms must be clean and dry.
- » Do not fill the storage rooms beyond their capacity.
- » **Separate foods properly** so that there is an air flow between them.
- » Record the temperature of cold storage room/freezer to check that they are operating correctly.
- » **Prepared food products, products of animal origin and of vegetable origin should be stored in different storage rooms.** If separating them in different cold rooms is not possible, keep them physically apart.
- » Do not place food containers directly on the floor.
- » Make sure **products are identified with labels** showing the name of the product, origin, date of entry in the cold room/freezer, weight, etc.



To prevent cross-contaminations, it is important to maintain a physical separation between raw and cooked foods and between different types of foods.



ARAVEN's containers help prevent cross-contamination thanks to their colour identification system (ColorClip) that ensures that color coded containers are always used to store the same kind of food.



CONSIDERATIONS FOR CORRECT FREEZING

- ✓ Adjust the amount of frozen food to the consumption unit.
- ✓ **Use suitable containers** to protect frozen products and to keep them separate.
- ✓ Use freezers that guarantee quick freezing.
- ✓ **Prevent ice and frost from forming** as this hampers freezing and impairs the correct functioning of freezer.
- ✓ **Keep** frozen products at a **temperature of -18 °C (-4 °F) or lower**.
- ✓ Frozen food can only be stored for a limited time. At freezing temperatures metabolic activity continues slowly and long freezing periods can alter the taste, colour and texture of foodstuffs, and “freezer burn” can appear on them. ⁽⁴⁾

“Freezer burn” is an alteration that dries out the surface of food, with the formation of dry spots and a change in colour. It causes a loss of nutrients and affects the quality of the product.



Protecting food during freezing helps prevent “freezer burn”

It is important that all food that is going to be frozen is tightly lidded. Use of plastic film is not recommended as it tears easily, and food can become unprotected.

ORGANISING MEASURES FOR FOOD PRESERVATION

Correct organisation of cold storage/freezer helps lessen any hygiene and health risks as well as improving productivity in the kitchen.

Placing food in airtight containers optimises the use of space, control of packaging dates, preparation and pre-processing, identifying food, and implementing an HACCP and efficient management system.

Organisation of food storage rooms:



TOP SHELVES: Prepared foods should be placed at the top part of cold rooms. This avoids any risk of cross-contamination of heat-treated foods by other foodstuffs that may drip onto them.

MIDDLE SHELVES: Raw meat and fish should be placed on the middle shelves of cold rooms.

BOTTOM SHELVES: They should be kept for foodstuffs that release big quantities of liquids so that, if liquid spills it does not cause cross-contamination in other foods.

To preserve meat and fish correctly they should be placed in containers that adapt to the quantity or sizes that will be used in the final preparation.

The following table provides a rough guideline to estimate container requirements based on the volumes of food to be stored. This quantity will depend very much on the type of foodstuff, its shape and also if it is fresh or frozen.

PROTEINS



Chicken wings or thighs

- ▶ Frozen and neatly arranged: 1kg / 2.2lb → 2 l / 2qt
- ▶ Fresh joints, in bulk: 1kg / 2.2lb → 3,2 l / 3.2qt



Chicken breasts

- ▶ Frozen and neatly arranged: 1kg / 2.2lb → 2 l / 2qt
- ▶ Fresh joints, in bulk: 1kg / 2.2lb → 2,8 l / 2.8qt



Beef

- ▶ Frozen fillet in bulk, not arranged: 1kg / 2.2lb → 2,8 l / 2.8qt
- ▶ Fresh joints, in bulk: 1kg / 2.2lb → 2,6 l / 2.6qt



Pork

- ▶ Frozen fillet in bulk, not arranged: 1kg / 2.2lb → 2,8 l / 2.8qt
- ▶ Fresh joints, in bulk: 1kg / 2.2lb → 2,6 l / 2.6qt



Fish

- ▶ Frozen fillet in bulk, not arranged: 1kg / 2.2lb → 2,8 l / 2.8qt
- ▶ Fresh fillets, in bulk: 1kg / 2.2lb → 2,4 l / 2.4qt



ARAVEN's products include features geared towards operational excellence, which make managing storage of raw materials easier and guarantee optimal preservation of all the organoleptic properties of foodstuffs.

To ensure that meat and fish are preserved correctly we recommend using:

- ✓ Systems that allow the drip loss released by fresh meat and fish, or during thawing, to drain away.
- ✓ Containers with lids to prevent cross-contamination between different types of food. This is a more sustainable system than using plastic film or aluminium foil. In addition, it stops food drying out or absorbing or releasing odours that affect its quality.
- ✓ In the case of meat and fish in joints/portions/filleted, use an airtight container with a drain tray to prevent the surface of the foodstuff drying out
- ✓ Systems for classifying and organising stored meat and fish, based on the date of storage, processing or thawing....
- ✓ Containers with smooth walls, without any nooks or crannies, to make cleaning easier.

Fresh meat and fish release a liquid called exudate or drip. Drips contain nutrients and a large amount of moisture **that encourage the growth of bacteria** and cause rapid spoilage of food.

To preserve this type of food correctly, **use drain trays and perforated pans that keep drips separate from the foodstuff** itself.



ARAVEN's perforated food pans and drain trays allow meat and fish to be stored without any contact between the food and drip loss. Using them correctly to preserve foods that release liquids, reduces levels of wastage due to spoilage.

Placing the drain tray at the bottom of the container to drain off liquids stops the food and liquid coming into contact and reduces the risk bacterial proliferation.



ARAVEN drain trays are designed to fit ARAVEN food containers (both GastroNorm and other sizes), and drain off drip loss to preserve food quality.

MEASURES FOR CORRECT THAWING

To thaw meat and fish transfer the products from the freezer to the cold room. Thawing out at temperatures of 5-7 °C (41 - 44 °F) or less reduces the rate of proliferation of microorganisms.

Under no circumstances should a product be thawed on a surface at room temperature since bacteria causing food-borne diseases can reproduce rapidly in meat and fish.



Food must be thawed at refrigeration temperature



-18°C



0°C

When thawing food it should be placed on the bottom shelf of the cold room, in a container with a lid to prevent the liquids released during thawing from dripping onto other food. The original food packaging should be removed and food should preferably be thawed on a drain tray or in a perforated food pan to separate it from the drip loss.

Estimated thawing time is approximately 10h/ 1kg (2.2lb) of foodstuff and the thawed product should be consumed within the following 24-48 hours. ⁽¹⁴⁾

Thawed food must never be re-frozen.



ARAVEN's containers, food pans, drain trays and lids have been designed based on hygiene and food safety criteria, allowing drip loss to be drained off and animal-origin proteins to be correctly lidded and preserved.

3

HYGIENE MEASURES FOR HANDLING MEAT AND FISH

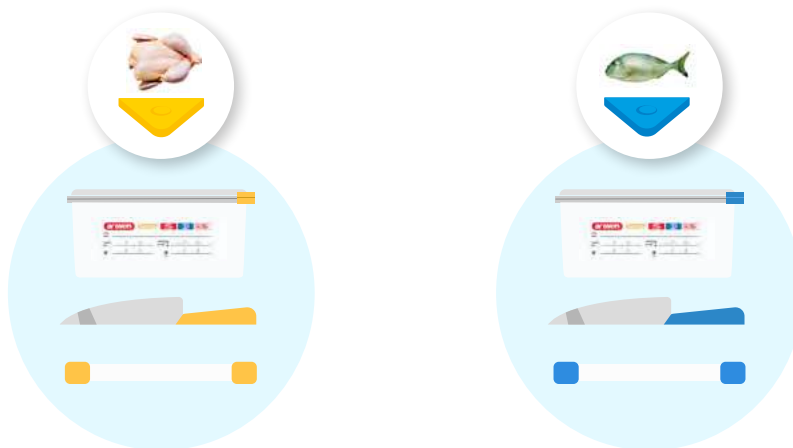
Special care must be taken **when handling meat and fish** to ensure they **remain outside the temperature danger zone (8 °C/46 °F to 65 °C/149 °F)**. They must be kept cold or be cooked as soon as possible. Avoid working with meat and fish in excessively hot environments.

If cooked food is not going to be consumed immediately it should be kept hot using appropriate means to ensure that all parts of the food are at temperature of 65 °C /146 °F or more , otherwise it should be immediately cooled using a blast chiller so reaching a core temperature of 8 °C/ 46°F in the food in maximum 2 hours.

Always separate raw food from cooked food and from food that has been cleaned and is ready to be eaten raw.

Raw food work zones should always be separate from cooked and pre-cooked food work zones.

Use different kitchen utensils (forks, knives, plates, chopping boards, etc.) to work with raw foods. Using different chopping boards for each food type prevents cross-contamination.

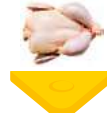


ARAVEN's chopping boards with different **coloured corners identify the type of food for which they are used**. These fixed coloured corners identify chopping surfaces according to food groups to prevent cross-contamination.

FISH



POULTRY



RED MEAT



PREPARED MEAT

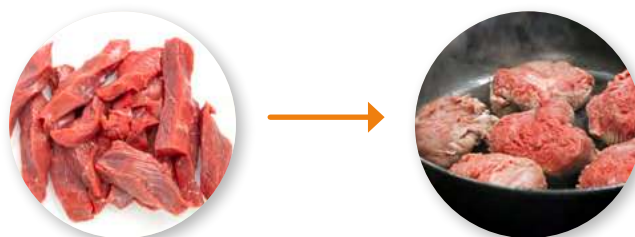


Food should be cooked sufficiently, especially meat, chicken, eggs, and fish. Roast meat and chicken should be cooked to core temperatures of more than 75 °C / 167 °F. Heating up food thoroughly destroys any microorganisms that develop during storage.

Certain types of foods require special handling precautions:

MINCED MEAT

- » Mincing meat makes it susceptible to contamination and the danger of food poisoning due to extended meat surface coming into contact with air. For this reason, it is important to take special hygiene precautions when handling minced meat.
- » Although current regulations allow the meat you mince yourself to be kept for 24 hours at temperatures below 2 °C / 35 °F ⁽¹³⁾, the recommendation is to avoid storing it and to cook it immediately after mincing.



FISH

- » Fish entrails (guts) must be removed immediately after receiving fish (although preferably they should be delivered already gutted), except in certain cases in which, for gastronomic reasons, gutting is not required.
- » Fish products must be totally frozen throughout at a temperature of -20 °C / -4 °F or less, for at least 24 hours.⁽¹⁵⁾
- » If fish is for cooking, then it should be cooked to a core temperature of 60-70 °C / 140-158 °F, for a minimum of one minute.



- ANNEX -

Regulatory temperatures for the storage of meat and fish.

TYPE OF PRODUCT	STORAGE TEMPERATURE
Fresh mutton, lamb, pork, beef, veal, goat, and horse meat.	≤ 7 °C / 44°F
Fresh chilled meat of chicken, turkey, guineafowl, duck, goose and rabbit, wild birds bred, reared and slaughtered in captivity and wild small game.	≤ + 4 °C / 39°F
Minced meat and minced meat preparations.	≤ + 2 °C / 35°F
Chilled offal.	≤ 3 °C / 37°F
Frozen meat and offal.	≤ - 12 °C / 53°F
Minced meat.	≤ 2 °C / 35°F
Fresh and chilled fish.	≤ 0 °C (Temp. Close to the melting point of ice)
Live bivalve molluscs.	At the minimum temp. guaranteeing their viability (around 8°C / 46°F).
Cooked meat dishes: to be consumed within less than 24 hours.	≤ 8 °C / 46°F
Cooked meat dishes: to be consumed later than 24 hours after cooking.	≤ 4 °C / 39°F
Frozen cooked meat dishes.	≤ - 18 °C / 64°F
Hot cooked meat dishes.	≥ 65 °C / 149°F
Thawing of products with subsequent heat treatment.	≤ 8 °C / 46°F
Thawing of products without subsequent heat treatment.	≤ 4 °C / 39°F

FOOD HYGIENE AND FOOD SAFETY FOR THE HANDLING AND STORAGE OF DRY FOOD

1 HYGIENE MEASURES FOR THE RECEPTION OF DRY FOOD



Reception of goods



Food storage and preservation



Food handling and preparation



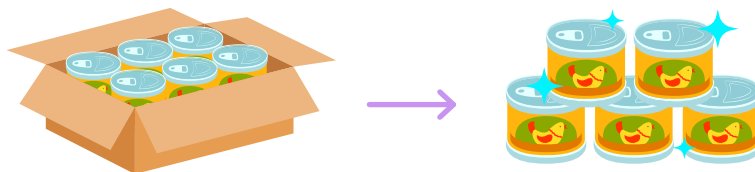
Food presentation or serving

It is important to ensure that all raw materials received comply with the health and quality requirements laid down to prevent foodstuffs endangering consumers' health. For this purpose, the provisions set out in the Hazard Analysis and Critical Control Points (HACCP) system must be followed.



When receiving a delivery of raw materials at restaurant facilities, the following is recommended : ⁽¹⁶⁾

- » **Designate a specific zone for exchanging goods.** There should be an area set aside for receiving/returning goods (specific zone, table, marked floor area...) located near to the goods entrance door, separated physically or provisionally from the rest of the establishment.
- » **Remove the packaging** of the raw materials received (cardboard box, plastic bag) whether or not the food is packed inside. This packaging is the outermost wrapping, used during distribution and transport.

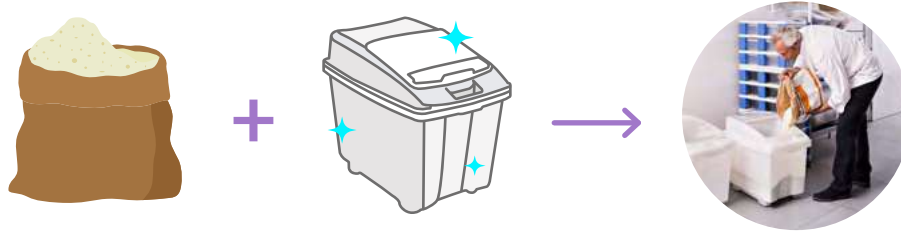


- » If there is no double packaging, **disinfect the container before incorporating it into the storage area** and disinfect those containers that have been in contact with the outside during the supply process..
- » Delivery notes should be left on the table to avoid contact with the supplier and should always remain in this reception zone.
- » All devices that are used (thermometers, pens, etc.) should always be used preferably by the same person. If they are shared, they should be disinfected after each use.



OTHER CONSIDERATIONS:

- » The establishment must have a **supplier control plan** to guarantee product quality.
- » All foods received must be checked to ensure that the containers and packaging are intact, the food temperature is correct, food labeling and shelf-life is correct, it has been transported in adequate hygiene conditions and that the delivery notes are correct.
- » Before the products received are placed in the establishment's own **containers**, check that they are **clean and have been disinfected**.



- » **Mark** the containers used for preserving and storing foods with the necessary information to enable all the products to be **traceable**.
 - » **Keep records** showing the checks conducted on the reception of products. ⁽¹⁷⁾
 - » **Do not take packaging** from the transportation of raw materials **into the processing areas**. ⁽¹⁷⁾
 - » Once the packing has been received and all procedures have been completed, the worker must wash their hands with soap and water following the instructions provided by official organizations such as the WHO or with hydroalcoholic gels. ⁽¹¹⁾
-
- ✓ The **temperature** in the reception area **must be below 25 °C / 77 °F** and humidity levels close to normal.
 - ✓ **Conduct visual controls** (the external appearance of the food and containers) of the raw material received and **remove** any canned food with **bulges** or signs of corrosion. Do not accept any food with defective packaging (bags of flour, jars, vats, etc.).
 - ✓ When handling bulk products, **do not mix** raw materials **from different batches** in the same container.
 - ✓ **Check the product labeling** (best-by dates) and remove or return any products that fail to meet the specifications demanded of the supplier.



When dry products (legumes, pasta, rice, etc.) are delivered in bulk or in large sacks and transferred to the company's plastic containers, the new container must be **marked** with the information on the original label (product brand, batch number, opening date and expiration date or best-by date), thereby ensuring the **traceability** of the raw material.

Hygiene measures must be stepped up
in all food handling phases

2 HYGIENE MEASURES FOR THE STORAGE AND PRESERVATION OF DRY FOOD PRODUCTS

The storage of food is one of the most important points to be taken into account to ensure food safety. Compliance with the provisions of the HACCP system updated to the context of COVID-19 must be guaranteed.

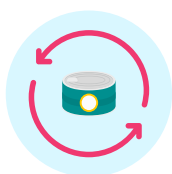
Although dry and non-perishable products such as legumes, rice, pasta, etc., present far fewer preservation difficulties in terms of time and storage than products such as vegetables, meat and fish, a number of measures need to be implemented to ensure such food is preserved in the appropriate manner.



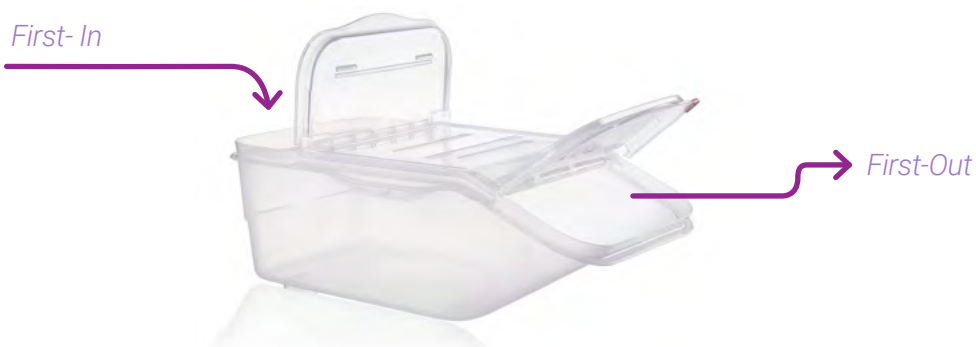
- Non-perishable **product storeroom should be cool, dry and free of aggressive odours**, and food needs to be kept **out of direct sunlight**. ⁽¹⁷⁾
- Shelving should be made of smooth, corrosion-resistant, harmless, waterproof materials that are easy to clean and disinfect. ⁽¹⁷⁾
- Products should be stored in an orderly manner and raw materials duly labeled to ensure they are not mixed up. ⁽¹⁷⁾
- Ensure different products do not come into contact with each other. ⁽¹⁷⁾
- Products must never be in contact with the floor. ⁽¹⁸⁾
- Reduce the presence of original packaging material in storage facilities to a minimum. ⁽¹⁸⁾
- Conduct regular checks of the state of storeroom. ⁽¹⁷⁾

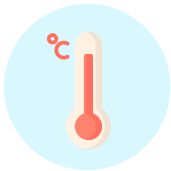
Control warehouse stock. We recommend keeping an inventory of all the existing products in the warehouse and to establish the frequency for checking the amount and condition of the products.

Despite the fact this kind of food will not deteriorate as quickly as perishable foods such as vegetables, meat and fish, some of the environmental practices and factors related to the conservation of the same are listed below. ⁽¹⁹⁾

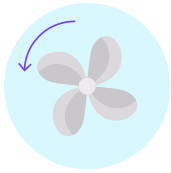


Product rotation: we recommend using the FIFO (first-in, first-out) management system. All stored **products should be marked with the date of arrival** in the warehouse and **the expiration** or best-by date.





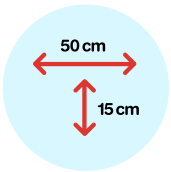
Temperature: storage areas should be kept cool, dry, and well aired. We recommend a room temperature of between 10 °C / 50 °F and 20 °C/ 68 °F.



Ventilation: a minimum air exchange rate is required. Storage areas should not feature any equipment that produces heat, such as uninsulated water and steam piping, water heaters, transformers, steam generators, fridge and freezer compressors, etc.



Humidity: humidity control is very important for the storage and preservation of dry food. A relative **humidity of between 50% and 60% is recommended.**

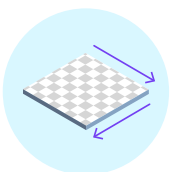


Spacing: ensure the layout of food and containers allows the air to circulate freely and that food is not in contact with the floor. A minimum distance of 15 cm from the floor and 50 cm from the outer walls is recommended in order to reduce the possibility of condensation.



Pest prevention: the entrances to the warehouse must be well protected and closed at all times to prevent insects and rodents from entering.

Pests are one of the greatest dangers to the preservation of dry food.



Warehouse size and use: warehouses should be sized in accordance with the needs of the establishment in order to optimise space management.

We have provided some suggestions for the transfer of certain food products to the restaurant's own containers.

DRY FOOD



Figure 1. Approximate illustrative figures for the transfer of dry food products.



ColorClip Accessible Containers are designed for perfect storage, optimal conservation, maximum hygiene and the strictest control of raw materials.

With regard to the storage of non-perishable raw materials, it is of paramount importance to **identify and separate all allergenic materials** from other food. Nuts, gluten-free cereals, peanuts, soy, mustard, lupins and food products containing these allergens as an ingredient must be clearly labeled and separated from other food in order to prevent cross-contact.



Store allergenic raw materials in clearly labeled areas to prevent cross-contact.



For the storage of non-perishable food with low humidity such as legumes, pasta, rice, etc., we recommend the use of containers with closable, not necessarily hermetically sealed, lids, thereby preventing moisture from infiltrating the container and spoiling the food.

Accessible Containers are ideal for the preservation of food with extremely low levels of humidity. The contents of the containers are accessible and the lid stays in the open position without having to be held.



We recommend the use of hermetic containers to prevent non-perishable foods sensitive to oxidation, environmental humidity or loss of aroma (snacks, spices, dehydrated products, nuts, biscuits, etc.) from spoiling.

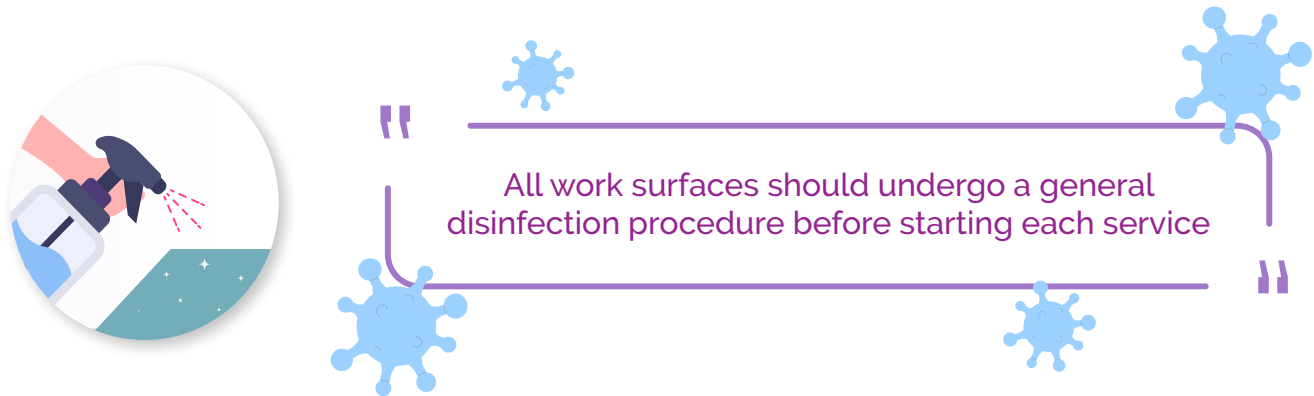


3

HYGIENIC MEASURES FOR HANDLING DRY FOOD

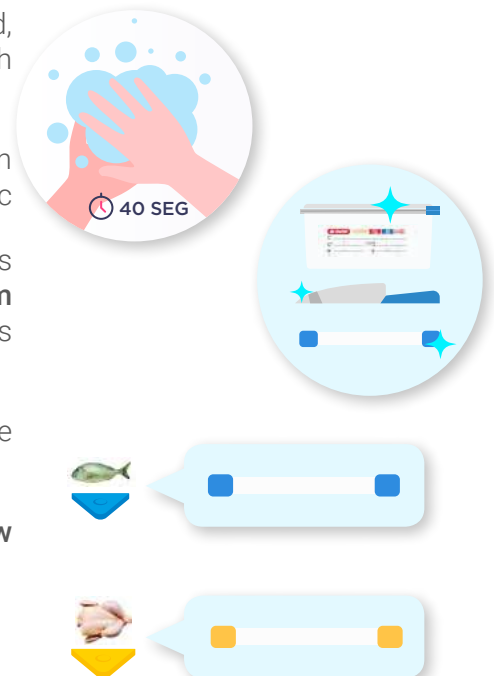
We recommend complying with the four basic rules (**clean, separate, cook and cool**) to prepare safe food and prevent food poisoning, and, in particular by ensuring thorough hand hygiene” Meaning; Safe food as an effect of having strict hand hygiene protocols.

Specific food handling measures to help prevent the SARS-CoV-2 coronavirus from spreading.



The following are some of the basic hygiene measures to be implemented when handling non-perishable or semi-perishable food ⁽⁷⁾:

- » **Hand hygiene with soap** and water before starting to prepare food, after handling raw food and when preparing meals, handling rubbish and waste, money, after using the bathroom, sneezing, coughing, etc.
- » **Clean kitchen surfaces and utensils before** using them, and, in particular, **after** handling raw food such as meat, fish, eggs, chicken, etc
- » **Work areas** for raw food must always be **separated** from work areas for dry, cooked and pre-cooked food. Always separate **raw food from cooked food**, and from food intended to be eaten raw and that has already been **washed**.
- » Label cutting boards and utensils to ensure they are not used to prepare different families of raw materials. ⁽¹⁷⁾
- » Use **different kitchen utensils** (forks, knives, plates, etc.) to handle **raw food**.
- » **Protect all food** until the moment it is processed.
- » **Refrigerate** cooked food as soon as possible, ensuring it is not exposed to room temperature for more than two hours.
- » **Keep** all surplus food in appropriate closed, labeled containers.



HYGIENE AND FOOD SAFETY IN THE HANDLING AND PRESERVATION OF PROCESSED FOODS

1

PROCESSED PRODUCTS: DEFINITION

A processed product or prepared food is a culinary preparation resulting from the raw or cooked or pre-cooked preparation of one or more food products of animal or vegetable origin, with or without the addition of other authorised substances and, where appropriate, seasoned. It can be presented packaged or unpackaged and ready for consumption, either directly, or after additional heating or culinary preparation. ⁽²¹⁾

2

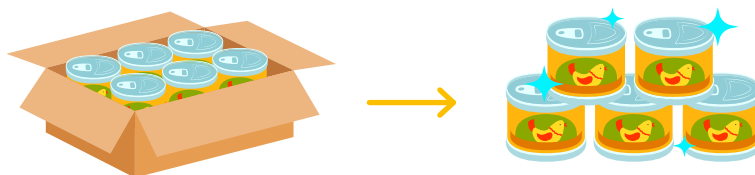
HYGIENE MEASURES FOR THE RECEPTION OF FOOD PRODUCTS

It is important to ensure that all raw materials received comply with the health and quality requirements laid down to prevent foodstuffs endangering consumers' health. For this purpose, the provisions set out in the Hazard Analysis and Critical Control Points (HACCP) system must be followed.



When receiving a delivery of raw materials at restaurant facilities, the following is recommended ⁽²⁾:

- » **Designate a specific zone for exchanging goods.** There should be an area set aside for receiving/returning goods (specific zone, table, marked floor area...) located near to the goods entrance door, separated physically or provisionally from the rest of the establishment.
- » **Remove the packaging** of the raw materials received (cardboard box, plastic bag) whether or not the food is packed inside. This packaging is the outermost wrapping, used during distribution and transport.



- » If there is no double packaging, **disinfect the container before incorporating it into the storage area** and disinfect those containers that have been in contact with the outside during the supply process.
- » Delivery notes should be left on the table to avoid contact with the supplier and should always remain in this reception zone.
- » All devices that are used (thermometers, pens, etc.) should always be used preferably by the same person. If they are shared, they should be disinfected after each use.



OTHER CONSIDERATIONS:

- » The establishment must have a **supplier control plan** to guarantee product quality.
 - » All foods received must be checked to ensure that the containers and packaging are intact, the food temperature is correct, food labeling and shelf-life is correct, it has been transported in adequate hygiene conditions and that the delivery notes are correct.
 - » Before the products received are placed in the establishment's own **containers**, check that they are **clean and have been disinfected**.
 - » **Mark** the containers used for preserving and storing foods with the necessary information to enable all the products to be **traceable**.
 - » **Keep records** showing the checks conducted on the reception of products. ⁽¹¹⁾
 - » **Do not take packaging** from the transportation of raw materials **into the processing areas**. ⁽¹¹⁾
 - » Once the delivery has been received and all procedures have been completed, the worker must wash their hands with soap and water following the instructions provided by official organizations such as the WHO or with hydroalcoholic gels. ⁽²²⁾
-
- ✓ Processed foods must be kept cold until they are cooked or reheated, removing them from the cold only when needed. ⁽²²⁾
 - ✓ When receiving processed products, it must be ensured that the cold chain is not broken between the reception and storage phases (in refrigeration or frozen).
 - ✓ Check the labelling of products (best before/best by/expiry dates) and discard or return products that do not meet the required specifications demanded of the supplier.

When processed products are transferred to the establishment's own storage systems, they must be identified, with the information on the original label (product brand, batch number, opening date and expiry date or best by date), on the new container, ensuring the **traceability** of the raw material.



”

The traceability of all foods used in food service industry must be guaranteed.

”

3

HYGIENE MEASURES IN THE STORAGE AND PRESERVATION OF PROCESSED FOODS

Keep **processed foods** in the optimum moisture and temperature conditions indicated by the product manufacturer.

All processed products must be able to be **perfectly identified** in storage areas.

A proper **management of allergens** is required in order to avoid allergies and/or intolerances.

Products for allergy sufferers (gluten-free, egg-free, dairy-free, etc.) must be stored **separately from all others**, in **closed containers**, both in the pantry and in the fridge (different shelves, boxes, cupboards, etc.).

Always keep the suppliers' **technical sheets** for any subsequent queries, and the original product labels.



4

HYGIENE MEASURES IN THE PREPARATION AND HANDLING OF PROCESSED PRODUCTS

A HACCP system updated to the context of COVID-19 must be implemented.



4.1

GUIDELINES AND RECOMMENDATIONS IN FOOD PREPARATION AREAS TO REDUCE THE RISK OF CONTRACTING THE SARS-COV-2 CORONAVIRUS

- ✓ **Separate the areas** for different **workers** by using marks on the floor or other similar measures.
- ✓ Perform a **general disinfection** of the **work surfaces** before starting each service.
- ✓ Have **disinfectant soap dispensers** next to the sink.
- ✓ Use paper for drying hands and dispose of this in rubbish bins with a non-manually operated lid.
- ✓ **Clean work tools and equipment** with the recommended products at the end of the working day.
- ✓ In preparation areas, hygiene must be maximised when handling packaging in order to avoid cross-contamination.

4.2

GENERAL CONSIDERATIONS IN THE PREPARATION AND HANDLING OF PROCESSED PRODUCTS

Processed products that must be kept for their subsequent service and consumption are subject to some basic recommendations regarding hygiene and food safety.

Separate, in time or place, the handling and preparation of raw materials from **different types of food** (mainly vegetables, meat and fish) to avoid potential cross-contamination. ⁽²⁴⁾

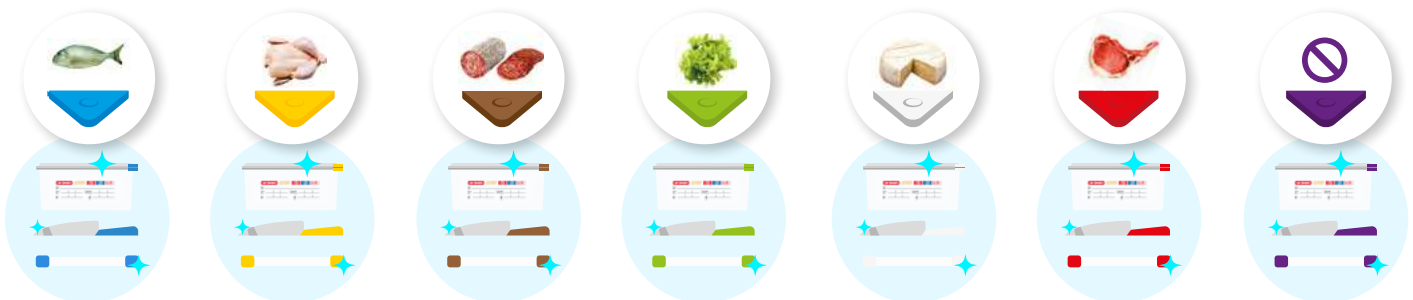


Separate, in time or place, the **cold preparation area** from the **hot preparation area**. ⁽²⁴⁾



Raw foods and semi-processed or processed foods must never be handled at the same time.

Identify chopping boards and utensils to avoid cross-contamination between the different families of raw materials.



Prepare foods that are not going to be frozen or refrigerated **as close as possible** to their moment of consumption.

Keep excess prepared foods in appropriate, closed, and labelled containers. ⁽²⁴⁾

4.3

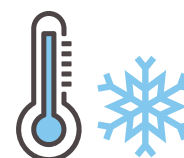
SPECIFIC HYGIENE MEASURES IN THE PREPARATION AND HANDLING OF COLD PROCESSED FOODS

Use a mask in cases in which there is no thermal treatment during preparation. ⁽²⁴⁾

The use of latex gloves is not recommended due to the potential allergic reactions it may cause to people with sensitive skin: use disposable vinyl or nitrile gloves.

If the **cold processed** foods contain products subject to thermal treatment, such as rice or pasta for salads, seafood, boiled vegetables, etc., these pre-processed foods must be cooled as fast as possible prior to assembly. ⁽²⁴⁾

Once prepared, the **cold processed foods must be stored** in containers with a lid and must be **kept refrigerated** at a maximum of 3 °C/ 37 °F until service. ⁽²⁴⁾



Max. 3 °C

The preparation of foods whose ingredients contain **egg** and that are not going to be later subject to a thermal treatment that reaches a **minimum of 75 °C/ 167 °F** (for example: mayonnaise, cocktail sauce, mousse, meringue, tiramisu and other similar products) must be carried out with liquid or dried, pasteurised or sterilised industrial egg products, and must not be preserved for more than 24 hours after preparation, not even in refrigeration. ⁽²²⁾

It is recommended that the **specific area for handling** these types of products is a cold store in order to minimise the handling of foods in cooking areas. When the kitchen is small, temporary separation may be used: **do not perform operations with raw and processed foods at the same time**, and clean and disinfect the area after each task.



All equipment and utensils used in food preparation must be cleaned and disinfected after use.

4.4

SPECIFIC HYGIENE MEASURES IN THE PREPARATION AND HANDLING OF HOT PROCESSED FOODS

During the cooking and/or thermal treatment for preservation, the **centre of the food must reach a temperature of at least 65 °C / 149°F** (and for a time no less than **2 minutes**); although this temperature is recommended to be 75 °C / 167°F or even 80 °C / 176°F in order to have a wider safety margin. ⁽²⁴⁾

Once the hot processed food has been cooked, it must be **kept hot**, or **cooled**, that is, its temperature must be lowered:



- ✓ **Minimise the time that it is kept at room temperature**, establishing the limit at 30 minutes, or ensuring that it does not fall below 65 °C. ⁽²⁴⁾
- ✓ **Cool quickly**. Guarantee a decrease in the temperature in the centre of the food from 65°C or higher temperatures to 8 °C in less than two hours. ⁽²²⁾

5

HYGIENE MEASURES IN THE PRESERVATION OF PROCESSED FOODS

Protect all processed foods **from environmental exposure** until the time of their consumption. The application of a thermal treatment to a food does not guarantee that there will be no subsequent contamination.

5.1

HEATED STORAGE

The preservation of hot processed products can be carried out using different techniques:



SIMPLE BAIN-MARIE OR THERMOSTATIC BAIN-MARIE:

The container of food is placed into boiling water or steam. This method keeps an even temperature and is suitable for **soups and broths**. The bain-maries must be filled frequently, and their temperature checked regularly.



WARMING TABLES:

The trays that are placed on the tables (e.g. **buffet services or school canteens**) are heated from the bottom. It is recommended to put out the processed foods in **small quantities** and increase the **replacement frequency**. In this way, the heat loss that occurs in the upper part of large portions is avoided, as this facilitates growth of bacteria.



INFRARED LAMPS:

Lamps are used for **foods**, which **require frequent replenishment** as they can dry out and shrink.



WARMING CABINETS:

These are used for **pies, fish, and chips**, and sometimes for **plated meats**. The temperatures of foods should be checked regularly because air currents cool them down.

GUIDELINES FOR CORRECTLY KEEPING FOOD HOT

- » Select the most appropriate technique depending on the type of preparation.
- » Keep the processed foods at a temperature **equal to or higher than 65 °C / 149 °F**. Check the temperature regularly.
- » The time spent in heated storage **must not exceed 3 hours**.
- » The heated storage equipment must reach a temperature of 65 °C / 149 °F before food is placed in them.
- » In the bain-maries, the water temperature must exceed 80 °C / 176 °F and the contact surface between the water and the container of processed foods must be maximised.
- » If the temperature of the heated storage system is less than 65 °C / 149 °F, the processed foods must be reheated at a temperature higher than 75 °C / 167 °F and the equipment must be reviewed.
- » It is recommended to use lids or items that avoid spillages of the processed foods into the isothermal storage equipment/containers, which may cause a subsequent contamination.
- » Perform a daily control of the temperatures of the spaces where the processed products are stored, including bain-maries, trolleys and warming tables, display cases, etc.

5.2

REFRIGERATED STORAGE

The time that the processed products that are going to be consumed cold and are stored at **room temperature** must be minimised (**maximum of 30 minutes**).
Maintain the cold chain of processed foods until they are cooked, reheated, or served.

GUIDELINES FOR REFRIGERATING PROCESSED FOODS

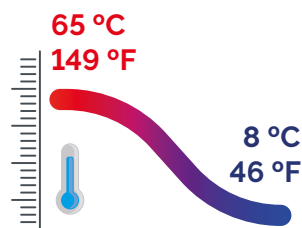
Cooked foods must be quickly cooled to avoid the proliferation of micro-organisms using techniques and/or equipment that guarantee a decrease in the temperature of the centre of the food from **65 °C / 149 °F to less than 8 °C / 46 °F in less than two hours**.



Quick cooling must not be confused with storing foods in refrigerated chambers.

In order to quickly decrease the temperature of a food, different techniques can be used:

- » Ice bath
- » Liquid nitrogen
- » Blast chiller



CORRECT USE OF BLAST CHILLERS

- » Dividing the cooked food into small portions speeds up the cooling process.
- » Hot foods should not be placed into refrigerators that are not prepared for this purpose.
- » The maximum capacity of a blast chiller must not be exceeded to ensure its proper operation.
- » Prepared foods must not be placed into blast chillers at temperatures exceeding 55 °C / 131 °F. Cooked foods should be transferred to smaller containers and cooled to 55 °C / 131 °F before being placed in a blast chiller.
- » Placing foods inside at temperatures exceeding 55 °C / 131 °F may have negative consequences:
Igloo effect: Formation of frost on the surface of the food, preventing the cold air from passing inside. This process facilitates bacterial growth and fermentation.

The mechanics of the blast chiller may become damaged and lead to increased electricity costs.

- » Hot foods must not be placed inside refrigerators or chambers next to other foods as they will increase the ambient temperature of the chamber and thus the temperature of all other foods.
- » At the end of the working day, ensure that the blast chiller is switched off with the door open and no food is left inside.

After the quick cooling, the processed products **must be stored at a temperature between 1 °C / 33 °F and 4 °C / 39 °F** until their subsequent reheating or final consumption.



In order to preserve refrigerated foods from possible contamination, they must be stored in containers with suitable lids, ideally airtight.

6

HYGIENE MEASURES FOR REHEATING PROCESSED FOODS

Reheating is the process through which a prepared food kept refrigerated or frozen is subject to a thermal treatment that increases its temperature until it can be served (at least 65 °C / 149 °F) in hygienic and gastronomic conditions.. (22) (24)

It is very important to achieve the temperature increase in the shortest possible time to avoid the proliferation of micro-organisms.

GUIDELINES FOR THE REHEATING PROCESS

- » Food should only be reheated once (avoid reheating multiple times).
- » Processes should be used that can achieve temperatures exceeding 75 °C / 167 °F inside the product in the quickest possible time (ideally in less than 1 hour).
- » Do not use heated storage systems (heated trolleys, bain-maries, etc.) to reheat foods as they do not have the required power.
- » Liquid foods (sauces, soups...) should be brought to the boil.
- » Reheated foods must be maintained at a temperature of at least 70 °C / 158 °F inside the product until their consumption.

7

HYGIENE MEASURES IN THE STORAGE OF PROCESSED PRODUCTS

Measures that must be taken into account in storage rooms:

- ✓ The interior of the storage rooms must be clean and dry.
- ✓ The capacity of the storage should not be exceeded.
- ✓ Properly separate the foods to facilitate the circulation of air.
- ✓ Record the temperature of the storage rooms to ensure their proper operation.
- ✓ Identify the products with labels that indicate their name, origin, entry date into the storage, weight, etc.
- ✓ Do not leave food containers resting directly on the ground.



Putting food into **airtight containers** allows the optimisation of space and allows an efficient management in catering services.



A correctly organised storage facilities reduce hygiene-sanitary risks and improve productivity in the kitchen

Properly storing processed foods **reduces the risk of cross-contamination**, as well as the transmission of aroma from one product to another.

It is recommended to store raw materials, processed products, products of animal origin and those of plant origin in different rooms. When separation into **different rooms** according to the food type is not possible, maintain a physical distance between the different food types.



Place processed foods at the top shelves to avoid possible cross-contamination due to spillages of other foods.

Processed foods and those not for immediate consumption must be **identified with their preparation date, and their shelf life must be respected.**

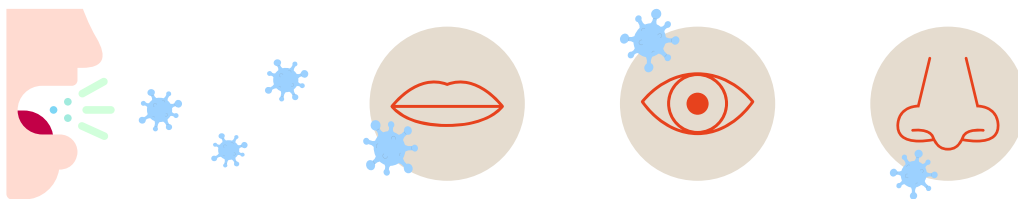


The shelves are perforated to facilitate the circulation of cold air and are devoid of sharp angles, corners, or protrusions to avoid the accumulation of food debris and water condensation.

POSTERS: "HYGIENE AND FOOD SAFETY"

HOW IS CORONAVIRUS TRANSMITTED ?

By respiratory droplets from an infected person.



CAN CORONAVIRUS BE TRANSMITTED BY FOODS ?

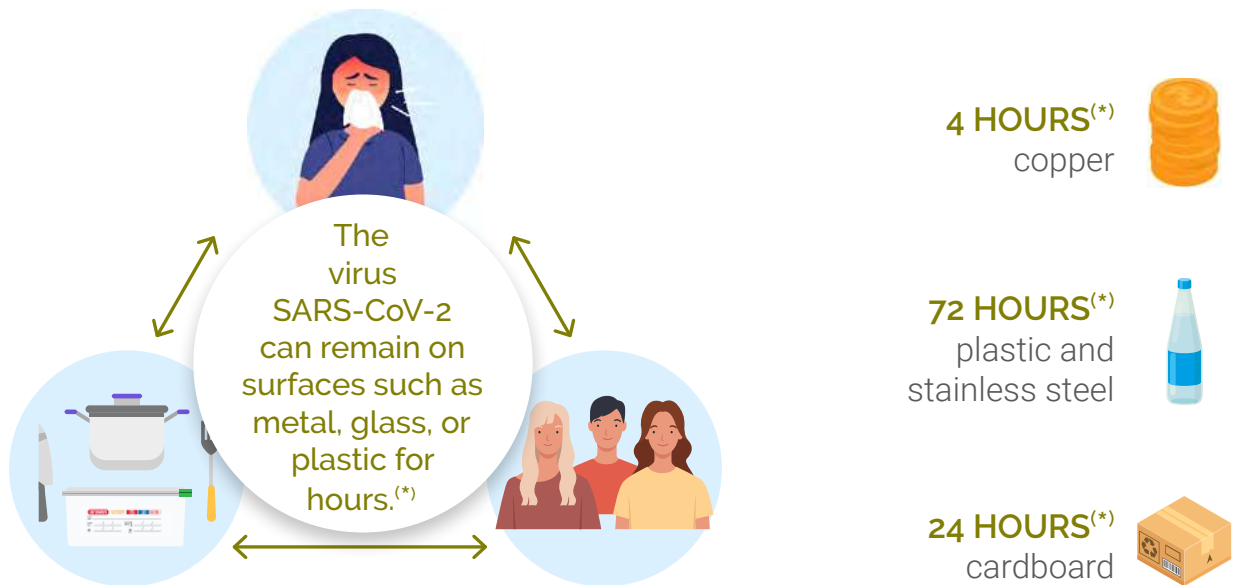


“
THERE IS NOT at present **ANY PROOF** of the transmission of coronavirus via food.
”



REMEMBER!

HOW LONG CAN COVID-19 SURVIVE ON SURFACES ?



(*) It depends on the temperature and relative humidity conditions.

WHAT PROTECTIVE MEASURES CAN YOU TAKE ?



Promote hand hygiene.



Protect utensils from environmental exposure.



Disinfect equipment and facilities.



Eliminate cardboard and plastic.

THE PRIORITY IS TO PROTECT FOOD HYGIENE AND SAFETY.

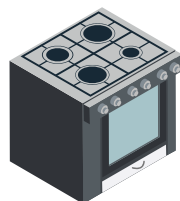


POSTERS: "HYGIENE AND FOOD SAFETY"



ENVIRONMENTAL SURFACES

Effective procedures are cleaning surfaces with **water and a detergent** and then applying a **disinfectant**.



STEEL SURFACES

Use chlorine-free disinfectants, such as **peroxides and phenolic disinfectants**.



RECOMMENDATION

Use **disposable cleaning materials** and **avoid the use of absorbent materials** such as fabric cleaning cloths.

PROPER USE OF BLEACH

When using bleach (sodium hypochlorite) as a disinfectant it is advisable to:

- ✓ Dilute bleach in cold water (hot water reduces its effectiveness).
- ✓ Prepare the solution every day to ensure its disinfecting power.
- ✓ Surfaces should be rinsed with clean water after a sufficient contact time.
- ✓ Do not mix bleach with other disinfectants that produce toxic fumes.
- ✓ Use 0.1% concentrations of bleach to obtain a disinfecting effect:



PRODUCT	INSTRUCTIONS	REMARKS
50 g/l (1.76 oz/qt) commercial bleach	Add 20 ml of bleach to 1 litre of water	One tablespoon is approximately 15 - 20 ml (0.5 - 0.7 oz)
40 g/l (1.41 oz/qt) commercial bleach	Add 25 ml of bleach to 1 litre of water	

PRECAUTIONS

Always use authorised disinfectants:

Select the disinfectant **according to the type of surface** to be disinfected.



Use specific disinfectants for surfaces and materials that will come into contact with food.



Do not mix disinfectants as this could cause toxic effects.



To ensure effective disinfection **follow the manufacturer's indications** (always keep technical data sheets).



WHAT CHARACTERISTICS SHOULD EQUIPMENT AND UTENSILS HAVE



Materials should not impart any toxic substances.



They should not impart any odours or flavours.



They should not be absorbent materials.



They should be corrosion resistant.

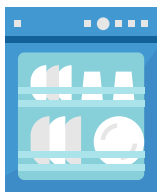


They should be resistant to repeated cleaning and disinfecting processes

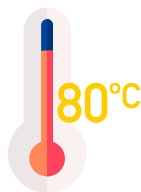


They should have smooth surfaces without dints or cracks.

HOW TO CLEAN AND DISINFECT KITCHEN UTENSILS



Check the correct functioning of the dishwasher.



Kitchen utensils should preferably be washed in the dishwasher at rinsing cycles that reach a temperature of 80°C / 176°F.



If hand washing is required, follow the usual steps (washing and rinsing) and dry with disposable paper towels.



Tableware, cutlery, glassware, and kitchen utensils should be washed preferably in the dishwasher.

WHAT RECOMMENDATIONS SHOULD YOU FOLLOW



You are advised NOT to use disinfectants to clean glass, plastic containers and cans, since some are porous and allow to absorb the disinfectant to pass through.



Disposable food packaging should not be reused as food containers.



Utensils that are going to come into contact with foods and kitchen utensils when not in use should be PROTECTED from environmental exposure.

POSTERS: "FOOD PRODUCTS RECEPTION"

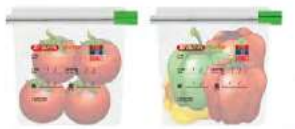
VEGETABLES

In the case of fresh produce, such as vegetables, swap the supplier's container for a clean, disinfected container in the reception zone.



Choose a container with sufficient capacity to store vegetables correctly:

Medium size:
Apples, tomatoes, etc...



Large size:
Watermelon, papaya, etc...

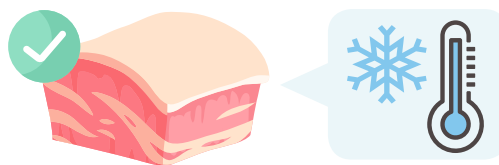


Whole leafy vegetables:
Lettuce, escarole, etc...

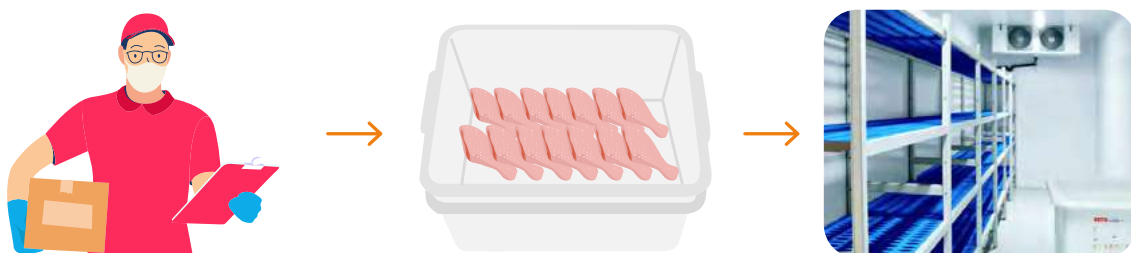


MEAT AND FISH

When receiving delivery of meat and fish it is essential to ensure that they are received at the correct temperature.

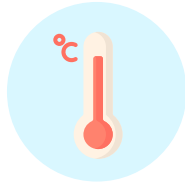


It is essential to **maintain the cold chain** by transferring them to cold room as quickly as possible.

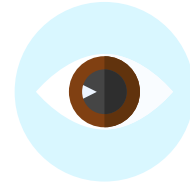


DRY FOOD

The temperature in the reception area must be below 25 °C / 77 °F



Conduct visual controls.



When handling bulk products, **do not mix** raw materials **from different batches** in the same container.



Check the product labeling (best-by dates).

L022/14
01/2020

When processed products are received and transferred to the establishment's own storage systems, they must be identified, with the information on the original label.

PROCESSED FOODS

Processed foods must be kept cold until they are cooked.



Check the product labeling (best-by dates).

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CONSUMIR PREFERENTEMENTE ANTES DE
03 2020

When processed products are transferred to the establishment's own storage systems, they must be identified, with the information on the original label.



POSTERS: "FOOD PRODUCTS RECEPTION"

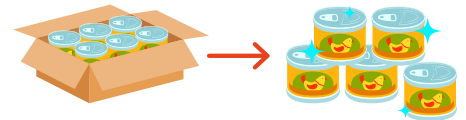
RECOMMENDATION



Designate a specific zone for exchanging goods.



Ensure that all raw materials received comply with the health and quality requirements.



Remove the packaging of the raw materials received (cardboard box, plastic bag).



Disinfect the container before incorporating it into the storage area.



Delivery notes should be left on the table to avoid contact with the supplier.



After receiving packages the zone should be cleaned and disinfected and staff must wash their hands.

OTHER CONSIDERATIONS



The provisions set out in the Hazard Analysis and Critical Control Points (HACCP) system must be followed.



All foods received must be checked to ensure temperature, food labeling, shelf-life and hygiene conditions.



Before the products received are placed in the establishment's own containers, check that they are clean and have been disinfected.



Keep records showing the checks conducted on the reception of products.



Mark the containers with the necessary information to enable all the products to be traceable.



The establishment must have a supplier control plan.



Do not take packaging from the transportation of raw materials into the processing areas.

- BIBLIOGRAPHY -

1. Food and Agriculture Organization (FAO). Codex alimentarius: food hygiene basic texts (Nº. Ed. 3). s.l. : Food and Agriculture Organization of the United Nations (FAO)., 2004.
2. World Health Organization (WHO). Coronavirus disease 2019 (COVID-19). Situation Report - 66. 2020.
3. Organización Mundial de la Salud. COVID-19 e inocuidad de los alimentos: orientaciones para las empresas alimentarias. OMS; 2020. Orientaciones provisionales.
4. Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. Van Doremalen, N., Bushmaker, T., Morris, D. H., Holbrook, M. G., Gamble, A., & Williamson, B. N. & Lloyd-Smith, JO. 2020, New England Journal of Medicine.
5. Persistence of coronaviruses on inanimate surfaces and its inactivation with biocidal agents. Kampf, G., Todt, D., Pfaender, S., & Steinmann, E. 2020, Journal of Hospital Infection.
6. Ministerio de Sanidad. Productos virucidas autorizados en España; 2020. Secretaria general de Sanidad. Dirección General de Salud Pública, Calidad e Innovación. Gobierno de España.
7. Ministerio de Sanidad. Covid-19 Guía de buenas prácticas para los establecimientos y trabajadores del sector turístico. 2020. Gobierno de España.
8. World Health Organization. Operational considerations for COVID-19 management in the accommodation sector. WHO; 2020. Interim guidance.
9. Agencia Española de Seguridad Alimentaria y Nutrición. COVID-19 y Seguridad Alimentaria. AESAN; 2020. Información para los consumidores.
10. Basque Culinary Center-Eurotoques (2020). Special COVID-19 protocol on prevention and safety in restaurant services.
11. Ministry of Industry, Commerce and Tourism. Measures to reduce the risk of infection by the SARS-CoV-2 coronavirus: Catering services. Guidelines and recommendations. May 2020.
12. Generalitat de Catalunya (2018). Measures to be taken into account for washing fruits and vegetables consumed raw. Use of sodium hypochlorite. Catalonia Food Safety Agency.
13. Spanish Royal Decree 1376/2003, of 7th November, laying down the health requirements for the production, storage and sale of fresh meats and meat products in retail establishments. Official State Gazette, 7th November 2003, no. 273, p. 40094-40101.
14. Generalitat de Catalunya. Thawing. Catalonia Food Safety Agency. May 2019.

15. Regulation (EC) N° 853/2004 of the European Parliament and of the Council, 29th April 2004, laying down the specific rules on the hygiene of food of animal origin.
16. Ministry of Health. Catering Services: Guidelines and Recommendations. Government of Spain. May 2020.
17. Standard UNE-167014:2014. Food safety and procedural requirements for central cold line production and distribution units. AENOR. 2014..
18. Norma UNE 167013:2017. Hostelería: Servicios de restauración. Requisitos de prestación de servicio. Normalización española. AENOR 2017.
19. Powitz R.W. (2015, June/July). 7 Simple Rules for Effective and Hygienic Dry Goods Storage. Food Safety Magazine. California (USA)..
20. Regional Government of Catalonia. Four rules for preparing safe food. Catalan Food Safety Agency.
21. Royal Decree 3484/2000, of 29 December, which establishes the hygiene standards for the preparation, distribution, and marketing of processed foods. Official State Gazette dated 12 January 2001, no. 11. (Last amendment: 8 March 2011)..
22. AENOR. Hospitality. Catering services. Requirements for the provision of the service. UNE 167013. Madrid: AENOR, 2017.
23. Instituto para la Calidad Turística Española (Institute for Spanish Tourism Quality - ICTE). Measures to reduce the risk of infection by the SARS-CoV-2 coronavirus, Part 5: Catering services. Guidelines and recommendations. UNE Specification 0066-5. May 2020.
24. AENOR. Hospitality. Food safety and procedural requirements for central cold line production and distribution units. UNE 167014. Madrid: AENOR, 2014.

RECOMMENDED PRODUCTS

**HANDLING
AND STORING
VEGETABLES**



FOOD HYGIENE AND FOOD SAFETY

Food safety must be guaranteed throughout the entire food chain. In the HORECA sector the following phases in managing and handling foods in the kitchen are identified:



Reception of goods



Food storage and preservation



Food handling and preparation



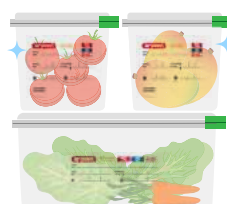
Food presentation or serving

Hygiene measures must be stepped up in all food handling phases.

The following guide focuses on hygiene and food safety measures relating to the handling and preservation of vegetables.

RECEIVING VEGETABLES

- » All foods received must be checked to ensure that the containers and packaging are intact, the food temperature is correct, food labeling and shelf-life is correct, it has been transported in adequate hygiene conditions and that the delivery notes are correct.
- » **Remove the packaging** of the raw materials received (cardboard box, plastic bag) whether or not the food is packed inside. This packaging is the outermost wrapping, used during distribution and transport.
- » **Packaging that cannot be removed** and that has been in contact with the exterior during the delivery process **should be disinfected**.
- » In the case of fresh produce, such as vegetables, **swap the supplier's container for a clean, disinfected container in the reception zone**.



WASHING AND DISINFECTING VEGETABLES

After receiving a delivery of fresh vegetables, they must be **washed** and then **disinfected**. The purpose of washing vegetables is to get rid of any soil, stones, insects, pesticides, etc. that may remain on the vegetables. Fruit and vegetables must be washed and disinfected to reduce or eliminate the microorganisms and any other possible pollutants on them.



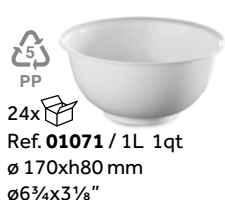
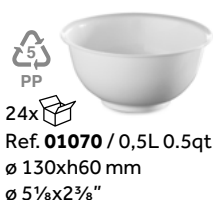
Wash fruit and vegetables under cold running water, especially those that are going to be eaten raw and unpeeled.

- » Remove any parts in poor condition.
- » Disinfect vegetables to be eaten raw and fruit that is not peeled before eating.
- » Do not handle washed fruits and vegetables on the same surface as those that are unwashed.
- » After disinfecting vegetables, consume immediately or store them in clean, disinfected containers. Refrigeration is essential to maintain the microbiological quality of clean fruits and vegetables.



ARAVEN perforated containers facilitate drainage in the washing processes.

BOWLS AND COLANDERS



STORING AND PRESERVING VEGETABLES

- » Before the products received are moved to the establishment's own **containers**, check that they are **clean and have been disinfected**.
- » Correct storage and preservation of food serves a dual purpose:
 - ✓ Ensuring optimal hygiene and food safety quality
 - ✓ Reducing the quantity of waste due to food spoilage.



TOP SHELVES:

Fruits and vegetables that are intended for **raw consumption**



LOWER SHELVES:

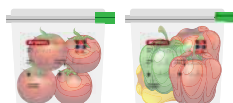
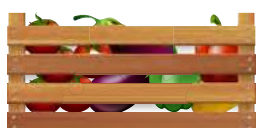
raw vegetables and fruits intended for preparation using a **heat treatment**



- » Choose a container with sufficient capacity to store vegetables correctly. Bear in mind the type of vegetable to estimate the volume that a certain amount of that product will occupy (See Table).



VEGETABLES

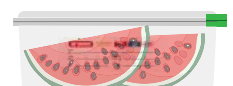
* Guideline weight-volume conversion table for various vegetables.



Medium size



- Apples, carrots, tomatoes, avocados, oranges, etc.

1kg
2.2 lb  → 2,3 litres
2.4qt 



Large size



- Watermelon, papaya, melon, pineapple, etc.

1kg
2.2 lb  → 2,2 litres
2.3qt 



Whole leafy vegetables

- Lettuce, escarole, chard, cabbage, etc.

1kg
2.2 lb  → 4,5 litres
4.7qt 

FOOD CONTAINERS WITH LID

Ref.
 ○ Ref. **01** ---
 ● Ref. **91** --- ○ HDPE ● PP



6x ○ ●
 Ref. **172** / 30L 7.5 Gal
 530x396xh159 mm
 20 $\frac{7}{8}$ x15 $\frac{5}{8}$ x6 $\frac{1}{4}$ "



12x
 Ref. **01178**
 432x332xh12 mm
 17x13 $\frac{1}{8}$ x $\frac{1}{2}$ "



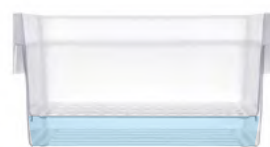
6x ○ ●
 Ref. **173** / 40L 10 Gal
 530x396xh225,5 mm
 20 $\frac{7}{8}$ x15 $\frac{5}{8}$ x8 $\frac{7}{8}$ "



23L
 24.3qt



6x
 Ref. **03171** / 35L 9.2Gal
 530x396xh205,5 mm
 20 $\frac{7}{8}$ x15 $\frac{5}{8}$ x8"



6,8L
 7.1qt



4x ○ ●
 Ref. **183** / 60L 16Gal
 530x396xh378,5 mm
 20 $\frac{7}{8}$ x15 $\frac{5}{8}$ x14 $\frac{7}{8}$ "



12x
 Ref. **01180**
 416x262xh10 mm
 16 $\frac{3}{8}$ x10 $\frac{1}{4}$ x $\frac{3}{8}$ "



6x ○ ●
 Ref. **00545** / 40L 10.5 Gal
 830x460xh180 mm
 32 $\frac{3}{8}$ x15 $\frac{1}{8}$ x7 $\frac{1}{8}$ "

FOOD TRANSPORT CONTAINERS

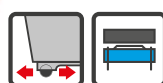
Containers with ventilation areas that can be opened or closed as required in order to ensure an optimal preservation of fruits and vegetables.



6x
 Ref. **01850** / 50L 13.2 Gal
 600x395xh410 mm
 3 $\frac{3}{8}$ x15 $\frac{1}{2}$ x16"



4x
 Ref. **01870** / 70L 18.5 Gal
 655x435xh455 mm
 23 $\frac{3}{8}$ x17 $\frac{1}{2}$ x16"



4x
 Ref. **01890** / 90L 23.8 Gal
 705x465xh480 mm
 27 $\frac{3}{8}$ x18 $\frac{1}{4}$ x19"



● **INGREDIENT BINS**

Recommended for preserving vegetables of volume and high rotation: potatoes, onions, etc.



GN 1/3

GN 2/3

GN 1/1 SISTEMA FIFO · SYSTÈME FIFO · FIFO SYSTEM



It is recommended to manage vegetables, whether refrigerated/frozen or at room temperature, **according to the FIFO (First in, First out)** system-sorted and separated into appropriate containers made from materials that are suitable for food contact.

Systems that facilitate an orderly food rotation: the first in - the first out.

Better stock control and reduction of waste through the FIFO system, with a loading lid and unloading lid.



Easy access to the interior, even when stacked.

Shelf accessibility. Allows stacking, space optimisation.



● GASTRONORM RACKS AND PERFORATED FOOD PANS

Fresh fruits and vegetables have a high water content. This characteristic is crucial in preserving them correctly since over time they release this water in the form of moisture which can condensate on the walls and bottom of food containers causing mould to appear which in turn could give rise to a process of rotting.

Containers intended for storing this kind of foodstuff **should not have airtight seals and should have ventilation zones** that allow water to evaporate without forming condensation.

Placing ARAVEN drain trays at the bottom of the container also allows air to flow around the food and prevents condensation and water accumulation from forming in the bottom area.



● GASTRONORM PERFORATED FOOD PANS

GN 1/6



Ref. **94073** / 1,9L 2qt
176x162xh5 mm
6⁷/₈x6³/₈xh5¹/₈"



0,53L 0.56qt

GN 1/3



Ref. **94075** / 4,6L 4.8qt
325x176xh130 mm
12³/₄x6⁷/₈xh5¹/₈"

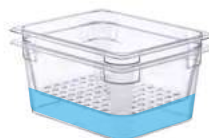


1,35L 1.42qt

GN 1/2



Ref. **94076** / 7,8L 8.2qt
325x265xh130 mm
12³/₄x10³/₈xh5¹/₈"



2,3L 2.4qt

GN 1/1



Ref. **94078** / 17,2L 18.1qt
530x325xh130 mm
20⁷/₈x12³/₄xh5¹/₈"



5,8L 6.1qt



● GASTRONORM FOOD PANS

GN 1/3



GN 1/2



GN 1/1



● GASTRONORM TOWERS

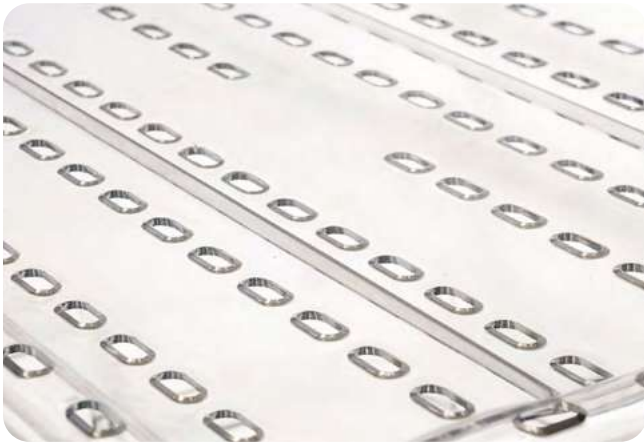
The ARAVEN GastroNorm tower ensures an optimal preservation of foods with moisture (fruits and vegetables). The structure of the tower itself serves as the lid of the container, so the tray does not need an additional lid, thus providing the tower with ventilation areas to ensure that air currents cool the food quickly, preserving it at suitable refrigeration temperatures and preventing moisture from accumulating inside, preventing mould growth.



Recommended for preserving more delicate vegetables: mushrooms, sprouts, strawberries.

● GASTRONORM 2/1 CONTAINERS

Recommended for preserving vegetables of high volume and the drainage of leafy vegetables in the washing process.



Fully Nested
Posición encajable
Position emboîtable



17L



17L

Stacked without lid
Posición apilable sin tapa
Position empilable sans couvercle




49L




68L



2x 
Ref. **04069** / 70L 18.5Gal
650x530xh300 mm
25 $\frac{5}{8}$ x21x11 $\frac{3}{4}$ "




2x 
Ref. **04070** / 90L 24Gal
650x530xh380 mm
25 $\frac{5}{8}$ x21x15"




2x 
Contact lid
Tapa de apoyo
Couvercle d'appui

Cod. **04071**
650x530xh20 mm
25 $\frac{5}{8}$ x21x $\frac{3}{4}$ "



2x 
Cod. **04079** / 70L 18.5Gal
650x530xh300 mm
25 $\frac{5}{8}$ x21x11 $\frac{3}{4}$ "



2x 
Ref. **04080** / 90L 24Gal
650x530xh380 mm
25 $\frac{5}{8}$ x21x15"



Fully Nested

Posición encajable
Position emboîtable



17L



17L

Stacked without lid

Posición apilable sin tapa
Position empilable sans couvercle



49L



68L

+80°C | +176°F
-40°C | -40°F

+90°C
+194°F



2x

Cod. **74069** / 70L 18.5Gal
650x530xh300 mm
25 $\frac{5}{8}$ x21x11 $\frac{3}{4}$ "



2x

Cod. **74070** / 90L 24Gal
650x530xh380 mm
25 $\frac{5}{8}$ x21x15"



2x

Contact lid
Tapa de apoyo
Couvercle d'appui

Cod. **74071**
650x530xh20 mm
25 $\frac{5}{8}$ x21x $\frac{3}{4}$ "



2x

Cod. **74079** / 70L 18.5Gal
650x530xh300 mm
25 $\frac{5}{8}$ x21x11 $\frac{3}{4}$ "



2x

Cod. **74080** / 90L 24Gal
650x530xh380 mm
25 $\frac{5}{8}$ x21x15"

COMPREHENSIVE IDENTIFICATION SYSTEM

- **ARAVEN MARKER + PERMANENT LABEL INCLUDED**



Mark the containers used for preserving and storing foods with the necessary information to enable traceability of all the products stored.

ARAVEN containers have a permanent traceability label integrated in the container to identify the contents and keep track of information relating to their origin. You can record the origin of the food, type of product, preparation, preservation conditions, best-before date, etc.

- **CLASSIFICATION BY FOOD TYPE**

ARAVEN containers, thanks to their colour identification system (ColorClip), help prevent cross-contamination, ensuring that the contents of a container are always of the same type. For vegetables they will be green.



CHOPPING BOARDS FOR HANDLING FOOD




Colour coding:


The colour in the corner of the board identifies the type of food to be handled.

The ARAVEN chopping boards have permanent colour corners, which allow these work surfaces to be differentiated according to the food groups to be handled, thus avoiding cross contamination. This differentiation is especially important between raw and cooked foods.


- Ref. 00 ___
- Ref. 02 ___
- Ref. 03 ___
- Ref. 05 ___
- Ref. 07 ___
- Ref. 22 ___
- Ref. 60 ___
- Ref. 08 ___



6x
Ref. __ **103**
304x204xh19 mm
11⁷/₈x8¹/₈x³/₄"



6x
Ref. __ **102**
404x304xh24 mm
15⁷/₈x11⁷/₈x⁷/₈"



4x
Ref. __ **101**
504x304xh34 mm
19⁷/₈x11⁷/₈x1³/₈"

- Ref. 00 ___
- Ref. 22 ___
- Ref. 03 ___
- Ref. 05 ___
- Ref. 07 ___
- Ref. 32 ___
- Ref. 60 ___



4x
Ref. __ **858**
604x404xh24 mm
23³/₄x15⁷/₈x⁷/₈"



3x
Ref. __ **859**
604x404xh34 mm
23³/₄x15⁷/₈x1³/₈"

HANDLING TRAYS

GN TRAYS

GN1/1



Ref. **00283**
13L 13.7qt · h100 mm 4"



Ref. **00256**
470x265xh20 mm
18½x10½x¾"



Ref. **00282**
9L 9.5qt · h65 mm 2½"

TRAYS WHITOUT LID



03171 01170 1171



Ref. **01129** / 2L 2.1qt
300x205xh60 mm
11¾x8½x2¾"



Ref. **01130** / 3L 3.1qt
345x235xh75 mm
13¾x9¼x3"



Ref. **01131** / 5L 5.2qt
435x285xh80 mm
17¾x11¼x3½"



Ref. **01179**
370x215xh10 mm
14½x8½x¾"



Ref. **01132** / 8L 8.4qt
485x335xh80 mm
19½x13¼x3½"



Ref. **01180**
416x262xh10 mm
16¾x10¼x¾"



Ref. **01133** / 10L 10.5qt
540x385xh80 mm
21¼x15½x3½"



Ref. **01134** / 20L 5.3Gal
440x350xh160 mm
17¼ x13¾x6¼"



Ref. **01182**
375x300xh12 mm
14¾x11¾x½"



Ref. **03171** / 35L 9.2Gal
530x396xh205,5 mm
20¾x15½x8"



Ref. **01170** / 25L 6.6Gal
530x396xh139 mm
20¾x15½x5½"



Ref. **01178**
432x332xh12 mm
17x13¾x½"



Ref. **01171** / 35L 9.2Gal
530x396xh205,5 mm
20¾x15½x8"

RECOMMENDED PRODUCTS

**HANDLING
AND STORING
MEAT AND FISH**



FOOD HYGIENE AND FOOD SAFETY

Food safety must be guaranteed throughout the entire food chain. In the HORECA sector the following phases in managing and treating foods in the kitchen are identified:



Reception of goods



Food storage and preservation



Food handling and preparation



Food presentation or serving

Hygiene measures must be stepped up in all food handling phases.

RECEIVING MEAT AND FISH

- » **Remove the packaging** of the raw materials received (cardboard box, plastic bag) whether or not the food is packed inside. This packaging is the outermost wrapping, used during distribution and transport.
- » **Mark** the containers used for preserving and storing foods with the necessary information to enable all the products to be **traceable**.



ARAVEN containers have a permanent traceability label integrated in the container to identify the contents and keep track of information related to their origin.

You can record the origin of the food, type of product, preparation, preservation conditions, best-before date, etc.

MEAT AND FISH STORAGE

After receiving raw foodstuffs, it is essential **to maintain the cold chain** by transferring them to cold room as quickly as possible.



Correct preservation of protein-rich foods is essential for several reasons:

- ✓ It guarantees hygiene and food safety and the health of diners as well as compliance with regulations. **It prevents the risk of bacterial contamination**, which in the case of proteins can be serious.
- ✓ It **reduces wastage** of this type of food that, in general, is the most expensive food kept in store in a kitchen.
- ✓ It guarantees the quality of preparations and the end result. **It maintains all the organoleptic properties of the food** (colour, taste, texture...) so that after preparation it is in perfect conditions for serving to customers.



ARAVEN's products include features geared towards operational excellence, which make managing storage of raw materials easier and guarantee optimal preservation of all the organoleptic properties of foodstuffs.

To ensure that meat and fish are preserved correctly we recommend using:

- ✓ Containers with smooth walls, without any nooks or crannies, to make cleaning easier.
- ✓ Systems that allow the drip loss released by fresh meat and fish, or during thawing, to drain away.
- ✓ Containers with lids to prevent cross-contamination between different types of food. This is a more sustainable system than using plastic film or aluminium foil. In addition, it stops food drying out or absorbing or releasing odours that affect its quality.
- ✓ Systems for classifying and organising stored meat and fish, based on the date of storage, processing or thawing...





ARAVEN's containers help prevent cross-contamination thanks to their colour identification system (ColorClip) that ensures that color coded containers are always used to store the same kind of food.



To preserve meat and fish correctly they should be placed in containers that adapt to the quantity or sizes that will be used in the final preparation.

The following table provides a rough guideline to estimate container requirements based on the volumes of food to be stored. This quantity will depend very much on the type of foodstuff, its shape and also if it is fresh or frozen.




PROTEINS

	Chicken wings or thighs <ul style="list-style-type: none"> ▶ Frozen and neatly arranged: 1kg / 2.2lb  → 2l / 2.1qt  ▶ Fresh joints, in bulk : 1kg / 2.2lb  → 3,2l / 3.4qt 
	Chicken breasts <ul style="list-style-type: none"> ▶ Frozen and neatly arranged: 1kg / 2.2lb  → 2l / 2.1qt  ▶ Fresh joints, in bulk: 1kg / 2.2lb  → 2,8l / 3 qt 
	Beef <ul style="list-style-type: none"> ▶ Frozen fillet in bulk, not arranged: 1kg / 2.2lb  → 2,8l / 3 qt  ▶ Fresh joints, in bulk: 1kg / 2.2lb  → 2,6l / 2.7qt 
	Pork <ul style="list-style-type: none"> ▶ Frozen fillet in bulk, not arranged: 1kg / 2.2lb  → 2,8l / 3 qt  ▶ Fresh joints, in bulk: 1kg / 2.2lb  → 2,6l / 2.7qt 
	Fish <ul style="list-style-type: none"> ▶ Frozen fillet in bulk, not arranged: 1kg / 2.2lb  → 2,8 liters  ▶ Fresh fillets, in bulk: 1kg / 2.2lb  → 2,4l / 2.5qt 

● MEAT AND FISH IN PORTIONS (FILLETED)




In the case of meat and fish in joints/portions/filleted, use an airtight container with a drain tray to prevent the surface of the foodstuff drying out.




























65mm · 2½"  **2-10L (2.1-10.5qt)**  / **1-5kg (2.2-11lb)** 

	PP	PP	PP	PC	ABS	PC
GN1/2	 Ref.03032 · 4L 4.2qt		 Ref.09855	 Ref.09821 · 2,8L 2.9qt	 Ref.07821 · 2,8L 2.9qt	 Ref.94034 · 4L 4.2qt
GN1/1	 Ref.03044 · 8,3L 8.5qt	 Ref.09292 · 9L 9.5qt	 Ref.09856	 Ref.09826 · 6,25L 6.6qt	 Ref.07826 · 6,25L 6.6qt	 Ref.94058 · 8,6L 9qt

100mm · 4"  **2-10L (2.1-10.5qt)**  / **1-5kg (2.2-11lb)** 

	HDPE	PP	PP	PC	ABS	PC
GN1/3	 Ref.00242	 Ref.03030 · 4L 4.2qt	 Ref.09854	 Ref.09819 · 3L 3.2qt	 Ref.07819 · 3L 3.2qt	 Ref.94026 · 3,7L 3.9qt
GN1/2	 Ref.00241	 Ref.03033 · 6,5L 6.8qt	 Ref.09855	 Ref.09822 · 4,85L 5.1qt	 Ref.07822 · 4,85L 5.1qt	 Ref.94035 · 6,2L 6.5qt

150mm · 6"  **2-10L (2.1-10.5qt)**  / **1-5kg (2.2-11lb)** 

	HDPE	PP	PP	PC	ABS	PC	PC
GN1/6	 Ref.00254	 Ref.03025 · 2,6L 2.7qt	 Ref.09852	 Ref.09798 · 1,9L 2qt	 Ref.07798 · 1,9L 2qt	 Ref.94017 · 2,3L 2.4qt	 Ref.94073 · 1,9L 2qt
GN1/4	 Ref.00243	 Ref.03028 · 4,3L 4.5qt	 Ref.09853	 Ref.09818 · 3,3L 3.5qt	 Ref.07818 · 3,3L 3.5qt	 Ref.94021 · 3,8L 4qt	
GN1/3	 Ref.00242	 Ref.03031 · 6L 6.3qt	 Ref.09854	 Ref.09820 · 4,7L 5qt	 Ref.07820 · 4,7L 5qt	 Ref.94027 · 5,5L 5.8qt	 Ref.94075 · 4,6L 4.8qt
GN1/2	 Ref.00241	 Ref.03034 · 10L 10.5qt	 Ref.09855	 Ref.09823 · 7,9L 8.4qt	 Ref.07823 · 7,9L 8.4qt	 Ref.94036 · 8L 8.4qt	 Ref.94076 · 7,8L 8.2qt

200mm · 8"  **2-10L (2.1-10.5qt)**  / **1-5kg (2.2-11lb)** 

	PP	PC	ABS
GN1/3	 Ref.09854	 Ref.09831 · 6L 6.3qt	 Ref.07831 · 6L 6.3qt

100mm · 4" 10-20L (10.5-21qt) / 4,5-10kg (10-22lb)



150mm · 6" 10-20L (10.5-21qt) / 4,5-10kg (10-22lb)



200mm · 8" 10-20L (10.5-21qt) / 4,5-10kg (10-22lb)



150mm · 6" 20-30L (21-31.7qt) / 10-15kg (22-33lb)



200mm · 8" 20-30L (21-31.7qt) / 10-15kg (22-33lb)





Fresh meat and fish release a liquid called exudate or drip. Drips contain nutrients and a large amount of moisture **that encourage the growth of bacteria** and cause rapid spoilage of food.

To preserve this type of food correctly, **use drain trays and perforated pans that keep drips separate from the foodstuff** itself.



ARAVEN's perforated food pans and drain trays allow meat and fish to be stored without any contact between the food and drip loss. Using them correctly to preserve foods that release liquids, reduces levels of wastage due to spoilage.

GN 1/6 h130mm · 5⅝"



Ref. **94073** / 1,9L 2qt

GN 1/3 h130mm · 5⅝"



Ref. **94075** / 4,6L 4.8qt

GN 1/2 h130mm · 5⅝"



Ref. **94076** / 7,8L 8.2qt

GN 1/1 h130mm · 5⅝"



Ref. **94078** / 17,2L 18.1qt



ARAVEN drain trays are designed to fit ARAVEN food containers (both GastroNorm and other sizes), and drain off drip loss to preserve food quality.



Ref. **00254** · GN 1/6



Ref. **00243** · GN 1/4



Ref. **00242** · GN 1/3



Ref. **00241** · GN 1/2



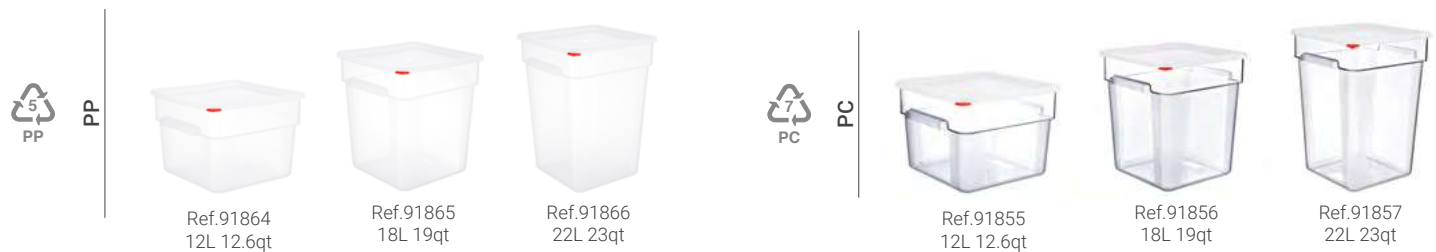
Ref. **00256** · GN 1/1

• **WHOLE FISH OR MEAT JOINTS/CUTS**

2-10L (2.1-10.5qt)  / 1-4kg (2.2-8.8lb) 



10-30L (10.5-31.7qt)  / 4-8kg (8.8-17.6lb) 



30-60L (7.5-16Gal)  / 12-24kg (26.4-53lb) 



60-100L (16-26.4Gal)  / 24-40kg (53-88lb) 



FREEZING MEAT AND FISH

» Freezer chambers must be at a temperature of **below -18 °C (-0.4°F)**.



- ✓ Adjust the amount of frozen food to the consumption unit.
- ✓ **Use suitable containers** to protect frozen products and to keep them separate.



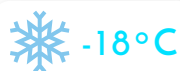
Protecting food during freezing helps prevent "freezer burn"

MEAT AND FISH DEFROSTING

To thaw meat and fish transfer the products from the freezer to the cold room. Thawing out at temperatures of 5-7 °C (41- 44,6 °F) or less reduces the rate of proliferation of microorganisms.

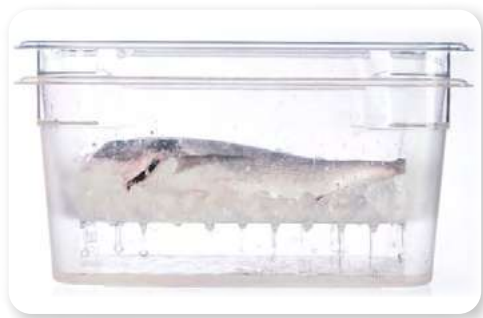


Food must be thawed at refrigeration temperature




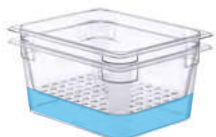






When thawing food it should be placed on the bottom shelf of the cold room, in a container with a lid to prevent the liquids released during thawing from dripping onto other food. The original food packaging should be removed and food should preferably be thawed on a drain tray or in a perforated food pan to separate it from the drip loss.

• PRODUCTS FOR MEET AND FISH DEFROSTING



ARAVEN's containers, food pans, drain trays and lids have been designed based on hygiene and food safety criteria, allowing drip loss to be drained off and animal-origin proteins to be correctly lidded and preserved.

GN1/2		+		+		
	Ref. 94038 · GN 1/2		Ref. 94036 8L 8.4qt · h150mm 6"		Ref. 94076 7,8L 8.2qt · h130mm 5 1/8"	2,3L 2.4qt
GN1/1		+		+		
	Ref. 94062 · GN 1/1		Ref. 94060 20L 21.1qt · h150mm 6"		Ref. 94078 17,2L 18.1qt · h130mm 5 1/8"	5,8L 6.1qt

150mm · 6" 10kg (22lb) PROTEIN 17-20L (4.4-5.2Gal)

GN1/1		+		+		
	KIT · Ref. 01828 · 17,5L 18qt					4,4L 4.6qt
GN1/1		+		+		
	Ref. 09829		Ref. 09828 · 19,6L 20.7qt		Ref. 09825 · 17,5L 18.4qt	

285mm
11 1/4" 20kg (44lb)  PROTEIN 35L (9.2Gal) 



300mm
11 3/4" 40kg (88lb)  PROTEIN 70L (18.5Gal)

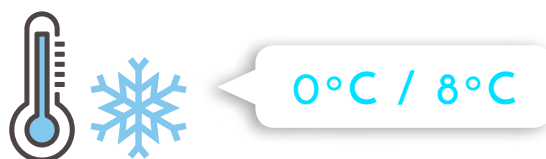


380mm
15" 50kg (110lb)  PROTEIN 90L (24Gal)



ORGANISATION OF FOOD STORAGE AREAS

- » **Cold rooms should be at temperature of between 0 and 8 °C (46.4°F)**, depending on the type of product. Ideal refrigerating temperatures are between 0 °C and +4 °C (39°F), but a cold room in which various products are stored should kept at the temperature of the product that requires the coldest temperature.



- » **Prepared food products, products of animal origin and of vegetable origin should be stored in different storage rooms.** If separating them in different cold rooms is not possible, keep them physically apart.



To prevent cross-contaminations, it is important to maintain a physical separation between raw and cooked foods and between different types of foods.

Correct organisation of cold storage/freezer helps lessen any hygiene and health risks as well as improving productivity in the kitchen.

Placing food in airtight containers optimises the use of space, control of packaging dates, preparation and pre-processing, identifying food, and implementing an HACCP and efficient management system.

Organisation of food storage rooms:



TOP SHELVES: Prepared foods should be placed at the top part of cold rooms. This avoids any risk of cross-contamination of heat-treated foods by other foodstuffs that may drip onto them.

MIDDLE SHELVES: Raw meat and fish should be placed on the middle shelves of cold rooms.

BOTTOM SHELVES: They should be kept for foodstuffs that release big quantities of liquids so that, if liquid spills it does not cause cross-contamination in other foods.

MEAT AND FISH HANDLING

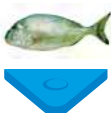
Special care must be taken **when handling meat and fish** to ensure they **remain outside the temperature danger zone (8 °C/46,4°F to 65 °C/149°F)**. They must be kept cold or be cooked as soon as possible. Avoid working with meat and fish in excessively hot environments.

Use different kitchen utensils (forks, knives, plates, chopping boards, etc.) to work with raw foods. Using different chopping boards for each food type prevents cross-contamination.



ARAVEN's chopping boards with different **coloured corners identify the type of food for which they are used**. These fixed coloured corners identify chopping surfaces according to food groups to prevent cross-contamination.

FISH



POULTRY



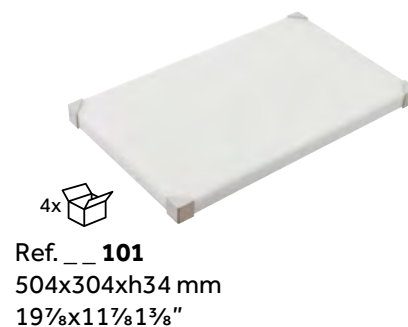
RED MEAT



PREPARED MEAT



- Ref. 00 _ _ _
- Ref. 02 _ _ _
- Ref. 03 _ _ _
- Ref. 05 _ _ _
- Ref. 07 _ _ _
- Ref. 22 _ _ _
- Ref. 60 _ _ _
- Ref. 08 _ _ _



- Ref. 00 _ _ _
- Ref. 22 _ _ _
- Ref. 03 _ _ _
- Ref. 05 _ _ _
- Ref. 07 _ _ _
- Ref. 32 _ _ _
- Ref. 60 _ _ _

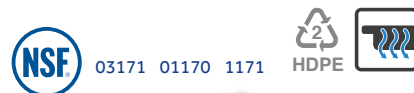


● HANDLING TRAYS

GN TRAYS

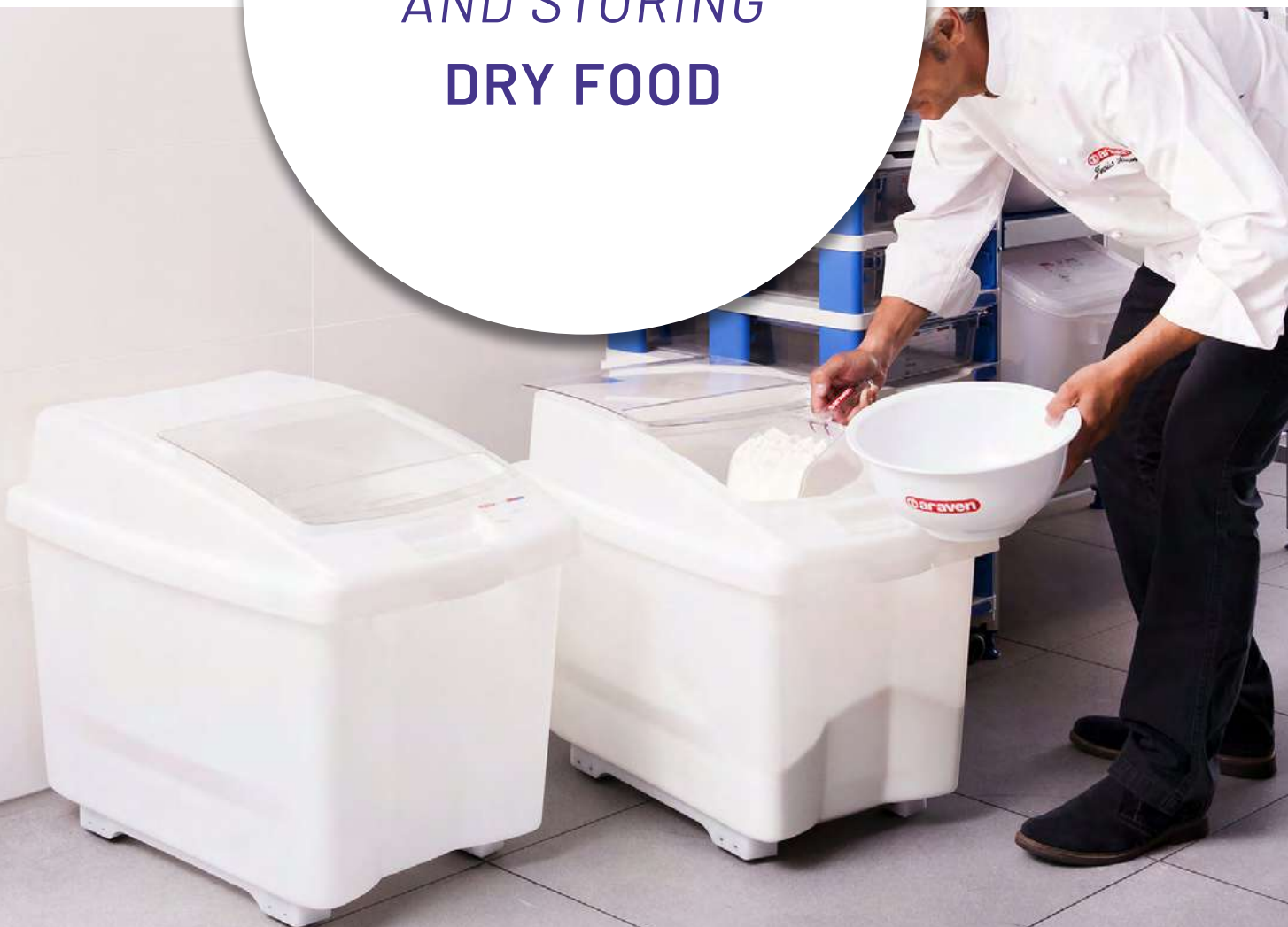


TRAYS WHITOUT LID



RECOMMENDED PRODUCTS

HANDLING *AND STORING* DRY FOOD



FOOD HYGIENE AND FOOD SAFETY

Food safety must be guaranteed throughout the entire food chain. In the HORECA sector the following phases in managing and treating foods in the kitchen are identified:



Reception of goods



Food storage and preservation



Food handling and preparation



Food presentation or serving

Hygiene measures must be stepped up in all food handling phases.

RECEIVING DRY FOOD

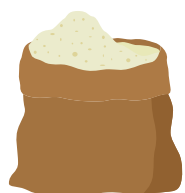
It is important to ensure that all raw materials received comply with the health and quality requirements laid down to prevent foodstuffs endangering consumers' health. For this purpose, the provisions set out in the Hazard Analysis and Critical Control Points (HACCP) system must be followed.



- » **Remove the packaging** of the raw materials received (cardboard box, plastic bag) whether or not the food is packed inside. This packaging is the outermost wrapping, used during distribution and transport.



- » Before the products received are placed in the establishment's own **containers**, check that they are **clean and have been disinfected**.



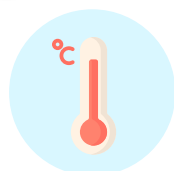
- » **Mark** the containers used for preserving and storing foods with the necessary information to enable all the products to be **traceable**.

When dry products (legumes, pasta, rice, etc.) are delivered in bulk or in large sacks and transferred to the company's plastic containers, the new container must be **marked** with the information on the original label (product brand, batch number, opening date and expiration date or best-by date), thereby ensuring the **traceability** of the raw material.

- » When handling bulk products, **do not mix** raw materials **from different batches** in the same container.



STORAGE AND PRESERVATION OF DRY FOOD



Temperature: storage areas should be kept cool, dry, and well aired. We recommend a room temperature of between 10 °C (50°F) and 20 °C (68°F).



Humidity: humidity control is very important for the storage and preservation of dry food. A relative **humidity of between 50% and 60% is recommended**.



Control warehouse stock. We recommend keeping an inventory of all the existing products in the warehouse and to establish the frequency for checking the amount and condition of the products.



We recommend the use of hermetic containers to prevent non-perishable foods sensitive to oxidation, environmental humidity or loss of aroma (snacks, spices, dehydrated products, nuts, biscuits, etc.) from spoiling.

● GASTRONORM AIRTIGHT CONTAINERS

GN1/9	<div><div></div><div>65mm · 2½"</div></div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 03020 · 0,6L 0.6qt</div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 04014</div>	<div><div><div>7</div><div>ABS</div></div></div> <div>Ref. 74010 · 0,6L 0.6qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 94010 · 0,6L 0.63qt</div>	
	<div><div></div><div>100mm · 4"</div></div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 03021 · 1L</div>		<div><div><div>7</div><div>ABS</div></div></div> <div>Ref. 74011 · 0,9L 1.1qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 94011 · 0,9L 0.95qt</div>	
	<div><div></div><div>150mm · 6"</div></div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 03022 · 1,5L 1.6qt</div>			<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 94012 · 1,2L 1.26qt</div>	
GN1/6	<div><div></div><div>65mm · 2½"</div></div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 03023 · 1,1L 1.2qt</div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 09852</div>	<div><div><div>7</div><div>ABS</div></div></div> <div>Ref. 07796 · 1L 1.1qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 09796 · 1L 1.1qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 94015 · 1L 1.1qt</div>
	<div><div></div><div>100mm · 4"</div></div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 03024 · 1,7L 1.9qt</div>		<div><div><div>7</div><div>ABS</div></div></div> <div>Ref. 07797 · 1,5L 1.6qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 09797 · 1,5L 1.6qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 94016 · 1,6L 1.7qt</div>
	<div><div></div><div>150mm · 6"</div></div>	<div><div><div>5</div><div>PP</div></div></div> <div>Ref. 03025 · 2,6L 2.7qt</div>		<div><div><div>7</div><div>ABS</div></div></div> <div>Ref. 07798 · 2,15L 2.2qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 09798 · 2,15L 2.2qt</div>	<div><div><div>7</div><div>PC</div></div></div> <div>Ref. 94017 · 2,3L 2.4qt</div>

We have provided some suggestions for the transfer of certain food products to the restaurant's own containers.

DRY FOOD



Figure 1. Approximate illustrative figures for the transfer of dry food products.

For the storage of non-perishable food with low humidity such as legumes, pasta, rice, etc., we recommend the use of containers with closable, not necessarily hermetically sealed, lids, thereby preventing moisture from infiltrating the container and spoiling the food.



• SQUARE CONTAINERS



Ref. 91851 · 2L 2.1qt
180xh100 mm
7½x7½x3¾"



Ref. 91852 · 4L 4.2qt
180xh190 mm
7½x7½x7½"



Ref. 91853 · 6L 6.3qt
225xh190 mm
8½x8½x7½"



Ref. 91854 · 8L 8.4qt
225xh230 mm
8½x8½x9½"



Ref. 91855 · 12L 12.6qt
285xh210 mm
11¼ x11¼x8¼"



Ref. 91860 · 2L 2.1qt
180xh100 mm
7½x7½x3¾"



Ref. 91861 · 4L 4.2qt
180xh190 mm
7½x7½x7½"



Ref. 91862 · 6L 6.3qt
225xh190 mm
8½x8½x7½"



Ref. 91863 · 8L 8.4qt
225xh230 mm
8½x8½x9½"



Ref. 91864 · 12L 12.6qt
285xh210 mm
11¼ x11¼x8¼"

• INGREDIENT BINS



ColorClip Accessible Containers are designed for perfect storage, optimal conservation, maximum hygiene and the strictest control of raw materials.



GN 1/3

GN 2/3



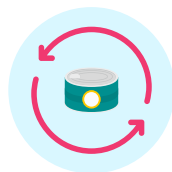
Ref. 09146 · 7L 1.8Gal
395x200xh200 mm
15½x8x8"



Ref. 09145 · 16L 4Gal
415x340xh200 mm
16¾x13¾x8"



Ref. 09308 · 14L
480x230xh227 mm



Product rotation: we recommend using the FIFO (first-in, first-out) management system. All stored **products should be marked with the date of arrival** in the warehouse and **the expiration** or best-by date.

First- In



First- Out



GN 1/1

FIFO SYSTEM



Ref. 09144 · 22,65L 6Gal
565x340xh200 mm
22¼x13¾x8"



Ref. 00918 · 50L 13Gal
565x340xh400 mm
22¼x13¾x15¾"



Accessible Containers are ideal for the preservation of food with extremely low levels of humidity. The contents of the containers are accessible and the lid stays in the open position without having to be held.



Ref. 00919 / 80L 21Gal
655x435xh560 mm
25¾x17½x22"



Ref. 00920 / 100L 26Gal
705x465xh580 mm
27¾x18¼x22½"



Sliding lid designed for greater accessibility.



Ref. 00446 / 30L 8Gal
ø 385xh385 mm
ø15½x15½"



Ref. 00448 / 60L 16Gal
415x415xh500 mm
16¾x16¾x19¾"



Ref. 91856 · 18L 19qt
285xh320 mm
11¼ x11¼x12½"



Ref. 91857 · 22L 23qt
285xh400 mm
11¼ x11¼x15¾"



Ref. 91865 · 18L 19qt
285xh320 mm
11¼ x11¼x12½"



Ref. 91866 · 22L 23qt
285xh400 mm
11¼ x11¼x15¾"



With regard to the storage of non-perishable raw materials, it is of paramount importance to **identify and separate all allergenic materials** from other food. Nuts, gluten-free cereals, peanuts, soy, mustard, lupins and food products containing these allergens as an ingredient must be clearly labeled and separated from other food in order to prevent cross-contact.



• ANTI-ALLERGIC AIRTIGHT CONTAINERS



GN 1/6

Ref. 61390 · 2,6L 2.7qt
176x162xh150 mm
6⁷/₈x6³/₈x6"

GN 1/4

Ref. 61392 · 4,3L 4.5qt
265x162xh150 mm
10¹/₂x6³/₈x6"

GN 1/3

Ref. 61393 · 6L 6.3qt
325x176xh150 mm
12³/₄x6⁷/₈x6"

GN 1/2

Ref. 61391 · 10L 10.5qt
325x265xh150 mm
12³/₄x10¹/₂x6"

GN 1/1

Ref. 61397 · 20,5L 21.6qt
530x325xh150 mm
20"x12³/₄x6"

HANDLING DRY FOOD



SCOOP



Ref. 09469 · 190cl 64oz
330x150x140 mm
13x5½x5½"



Ref. 09459 · 95cl 32oz
280X120X120 mm
11x4¾x4¾"



Ref. 09265 · 60cl 20oz
126x110x120 mm
5x4¾x4¾"



Ref. 09457 · 18cl 6oz
250x80x55 mm
9¾x3½x2½"





FOOD SAFETY INNOVATION



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