TÜV AUSTRIA

# Food safety & measures of protection

from virus COVID-19



# 1. Brief introduction with reference to food safety data so far

Measures of protection from virus SARS-CoV-2, known as COVID-19 pandemic, have resulted in the implementation of strict measures to reduce the transmission of the virus by pausing operation of many businesses.

The Food Industry is a sector that has kept its continuous operation at all levels, throughout the total supply chain, from production to the final consumer.

To maintain the Food Safety and consumers' confidence that they are buying safe products, the food industry shall have to adopt and implement all the appropriate protection measures related to Food Safety.

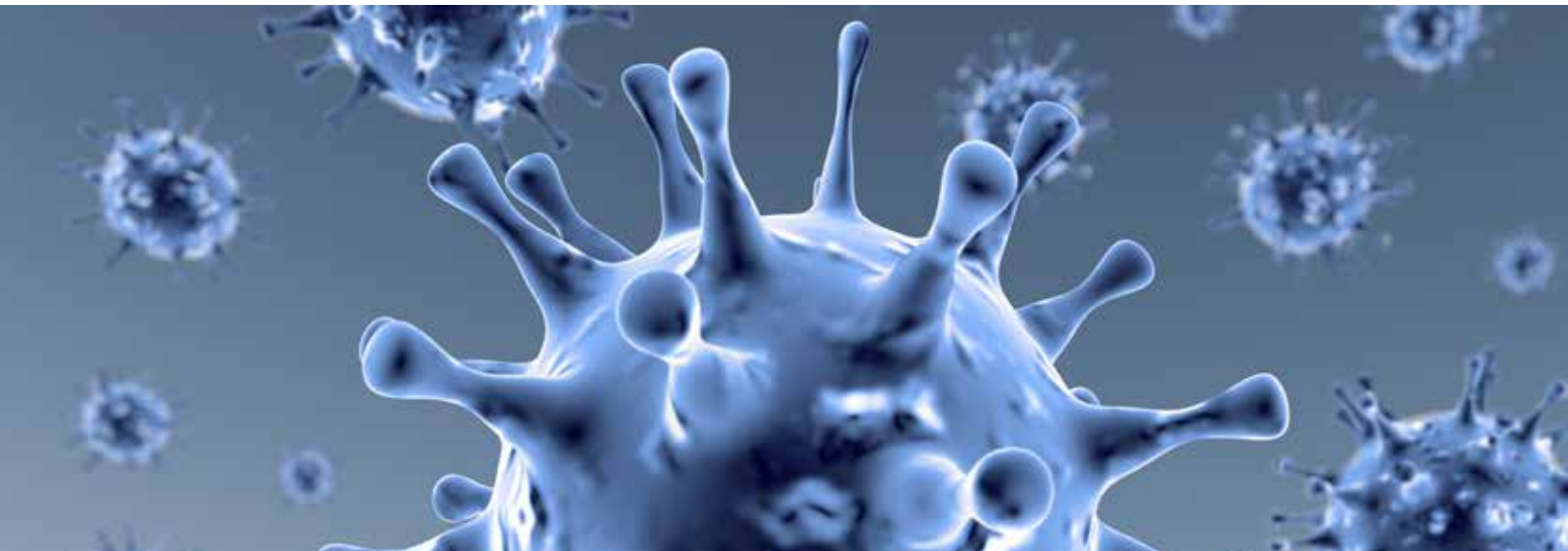
Measures that are reinforced by the existence of a Food Safety Management based on the HACCP and Critical Control Point principles should be in place to manage food safety risks and prevent food contamination.

The prerequisite programs implemented by the Food Industry, include the basic conditions that are required to form and preserve a suitable environment for the production and processing of safe food, such as:

- Good Hygiene practices (GHPs).
- Personal Hygiene.
- Cleaning and sanitation of equipment and plant.
- Good Manufacturing Practices (GMPs).
- Controls (delivery of raw material, temperature, suppliers, etc.).
- Adequate storage conditions for products and raw material.
- Transport and distribution.

**The purpose of these guideline is to highlight the points where additional measures for food safety should be taken in concern of potential hazards that may arise from SARS-CoV-2.**

**These risks arise only when an infected person or contaminated products or items enter into the premises.**



## 2. Potential transmission of COVID-19 via food

According to the current scientific data we can conclude to the following:

There is no evidence that food is a source or transmission route.

Coronaviruses cannot multiply in food.

Coronaviruses need an animal or human host to multiply (animal or people).

Recent research evaluated the survival of SARS-CoV-2 virus on different surfaces, reported that the virus can remain viable for up to:

- 72 hours on plastic and stainless steel.
- 24 hours on cardboard.
- 4 hours on copper.

This research was conducted under laboratory conditions (controlled relative humidity and temperature) and should be interpreted with caution in the real-life environment.

It is crucial for the food industry to strengthen personal hygiene measures and provide refresher training on food hygiene principles to eliminate or reduce the risk of food surfaces and food packaging material becoming contaminated with the virus from employees in the food sector.

We should not avoid the following Good Hygiene Practices:



**Never touch ready-to-eat food with bare hands. Use single service gloves, deli tissues, or suitable utensils.**



**Wrap food containers to prevent cross contamination.**

Follow the **4 steps** to food safety: **Clean, Separate, Cook and Chill**



**Frequent cleaning and disinfection of hands and surfaces.**



**Disinfection of fresh fruit and vegetables.**



**Separation of cooked and raw products – to avoid cross contamination.**



**Proper cooking (right temperature according to each product).**
**Proper Storage under Freezer/ Refrigerator.**
**Proper defrost of Food - Thaw frozen food safely in the refrigerator, in cold water, or in the microwave.**

Source: FDA Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services during the COVID-19 Pandemic.



# 3. Work environment

## Preventing the spread of SARS-CoV-2 in the work environment:

**The food industry should have Food Safety Management Systems based on Hazard Analysis and Critical Control Point principles in place to manage safety risks and preventing the spread of SARS-CoV-2 in the work environment. Some of them might be the following:**

- Resetting company Cleaning and Disinfection programs and keep them up to date by reviewing the following:
  - Frequency of cleaning and disinfection applications.
  - Concentration, temperature and contact time of detergents used for cleaning and disinfection.
  - Same applies on plant canteens, resting areas, wardrobes and toilets.
  - Same applies on production areas and secondary areas of the site.
- Restructuring Visitors Procedure and entrance control processes.
- Gaining better control of external maintenance and engineering teams.
- Restricting staff movement through different areas of the site to facilitate reduced interaction between people.
- Sanitizing vehicles specially when entering internal warehouses.
- Training food workers on hygiene practices.
- Communicating with suppliers and subcontractors for exchanging information or training and for sharing thoughts related to SARS-CoV-2.
- Enhancing awareness of SARS-CoV-2 common symptoms through staff and train them in company policies for management of illness in the workforce.
- Promoting usage of technology during meetings, training sessions, documentation keeping, communication between departments of the company or among customers or suppliers.

## Preventing the spread of SARS-CoV-2 between staff:

**The food industry should implement guidelines for prevention of SARS-CoV-2 spread between staff members. Some of them might be the following:**

- Provide protective equipment to all workers.
- Regulate the number of staff per shift and limit them by spreading the workforce into more shifts during the day.
- Physical distancing of at least 2 meters between fellow workers should be implemented either by stagger workstations on either side of processing lines of by spacing out the areas of production lines.
- Organizing staff into small groups during intervals.
- Minimizing physical meetings inside the company only to the very critical ones and permit access to specific members.
- Following national guidelines and recommendations.

## Personal Protective Equipment PPE

It is highly recommended to keeping physical distancing (of at least 2 meters) for reducing exposure to respiratory droplets while at the same time is imperative for the food industry to reinforce personnel hygiene and disinfecting of food contact surfaces.

Personal protective equipment should be provided to all employees, when needed, such as hair nets, disposable gloves, controlled clothing, face masks, work shoes etc. PPE should be used as an additional measure of prevention and should not replace physical distancing, handwashing and good hygiene practices.

## Cleaning and Sanitation in the work environment

**Good Manufacturing and Personnel Hygiene Practices are generally recommended by national and international authorities as a preventive measure of the virus spreading, such as:**

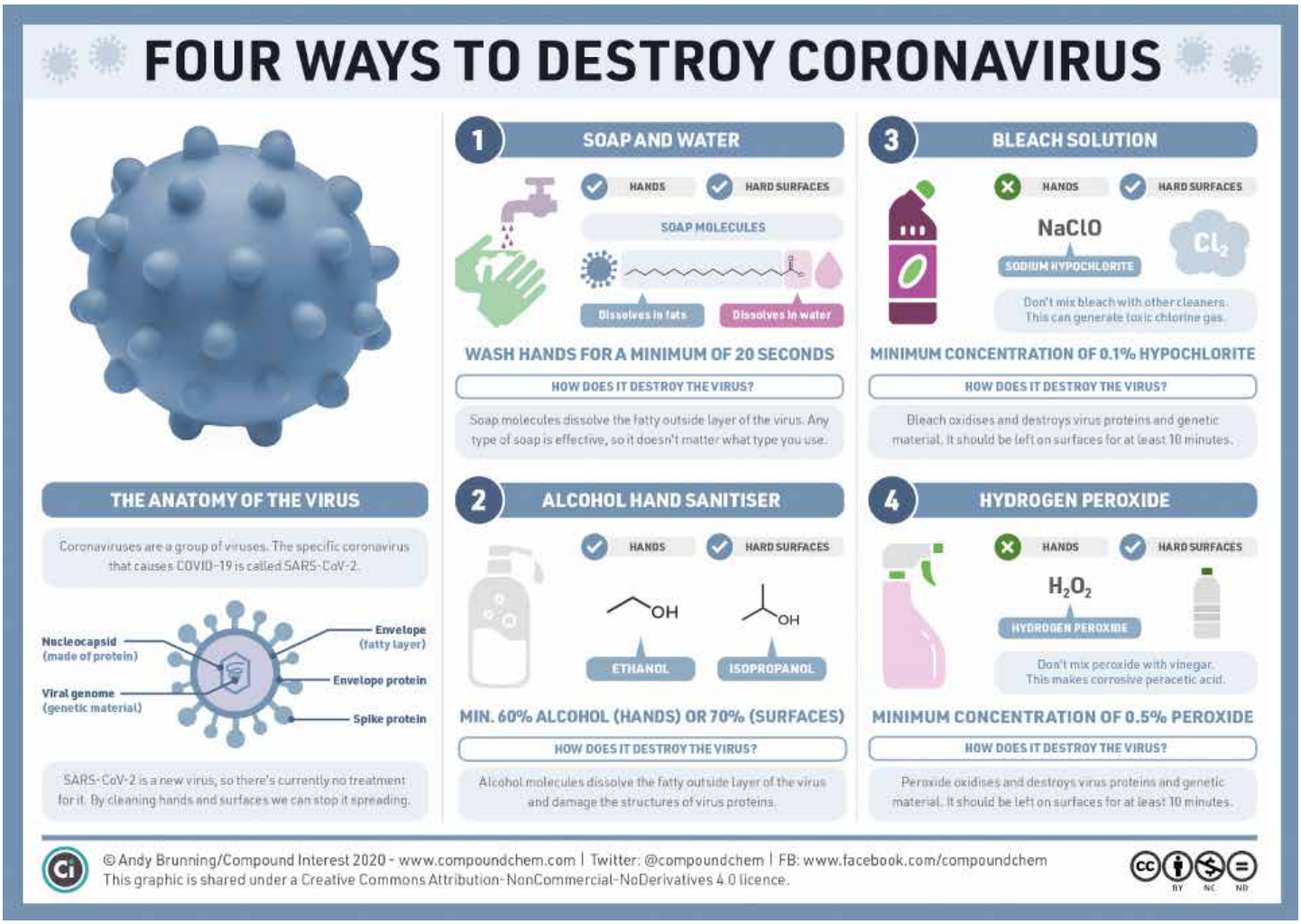
- Proper and frequent handwashing for 20 seconds.
- Hot tap water and regular soap for handwashing.
- Alcohol-based hand sanitizers and disinfection for industrial equipment.

**The following products and practices are often used:**

- Hand gel sanitizers.
- Regular soap and increased temperature of water used for cleaning and rinsing.
- Detergents and disinfections for industrial use.

**A non-exhaustive list of cleaning agents and disinfectors according to EPA (United States Environmental Protection Agency) Guidelines:**

- Bleach solution with a concentration of 0.1-0.5% hypochlorite.
- Quaternary ammonium compounds.
- Alcohol with a concentration of 70% alcohol.
- Hydrogen peroxide solution with a concentration of 0.5% peroxide.




## 4. Transport and delivery of food

**All employees involved in the distribution and delivery of food should be aware and follow all the appropriate measures to avoid food contamination:**

- Do not leave their vehicles exposed.
- Be supplied with an alcohol-based hand sanitizer.
- Use of a hand sanitizer before any transaction with staff at food production and/or processing facilities.
- Utilize single use products wherever possible to avoid the need of cleaning any returns.
- Training of involved parties in the potential Hazards originating from transmission through contacts.
- Frequent cleaning and sanitizing of surfaces that are likely contaminated with the virus, such as steering wheel, handles, devices, etc.
- Keep appropriate distancing during the delivery of products.
- Maintain personal Hygiene rules.
- Containers used for transport must be kept clean and frequently disinfected.
- Food protection from cross contamination.

# 5. Food outlets

During the COVID-19 pandemic, the food retail sector faces the greatest challenges in maintaining the highest standards of hygiene, protecting staff from the risk of infection, maintaining physical distancing when dealing with large numbers of customers.
During the pandemic the food retail store must be remained open and of course they must ensure that adequate supplies of foods are available on a daily basis.

**Some advices are summarized below:**



## 5.1 Retail food sector

- Regulating the number of customers who enter the retail store to avoid overcrowding.
- Placing signs at entry points to request customers not to enter the retail shop if they are unwell or have symptoms related to COVID-19.
- Managing queue control consistent with physical distancing barriers.
- Providing hand sanitizers / disinfectants, and single use gloves at store entry points.
- Making regular announcements to remind customers to follow physical distancing advice and clean their hands on a regular basis.
- Using floor markings inside the retail store to facilitate compliance with the physical distancing, particularly in the most crowded areas.
- Encouraging the use of contactless payments and avoiding using cash.
- Advice consumers to clean their shopping bags (if they use their own reusable shopping bags) before every use and before entering the food retail premises.



### 5.2 Open food display in retail premises

- Maintain frequent washing and sanitizing of all food contact surfaces and utensils in direct contact with food.
- Require employees to frequently wash hands, and, if using gloves, these must be changed before and after food preparation.
- Require food service workers to frequently clean and sanitize the equipment they use regularly (serving utensils and condiment containers etc.).
- Make available hand sanitizer for consumers on their way in and out of the food premises.
- Should consider not to openly displaying unwrapped bakery products (advice to be placed in plastic or paper packaging or whatever food packaging material).

TÜV AUSTRIA continues to monitor the situation closely for any changes that may affect this guide.

In case of change/modification of the above, TÜV AUSTRIA will issue a further updated guide based always on the latest scientific data.


References

1. European Food Safety Authority- EFSA (https://www.efsa.europa.eu/en/news/coronavirus-no-evidence-food-source-or-transmission-route)
2. Coronavirus disease (COVID-19) advice for the public. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public
3. National Public Health Organization – NPHO (https://eody.gov.gr/neos-koronaios-covid-19/)
4. Hellenic Food Safety Authority – EFET (http://www.efet.gr/index.php/el/enimerosi/deltia-typou/news-other-cat/item/4912-trofima-kai-koronoios-mas-rotate-sas-apantame)
5. World Health Organization – WHO (https://www.who.int/emergencies/diseases/novel-coronavirus-2019)
6. WHO - COVID-19 and Food Safety: Guidance for Food Businesses: interim guidance
7. The German Federal Institute for Risk Assessment (BfR) (https://www.bfr.bund.de/cm/349/can-the-new-type-of-coronavirus-be-transmitted-via-food-and-toys.pdf)
8. Van Doremalen N, Bushmaker T, Morris DH et al. Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1. N Engl J Med. 2020 Mar 17. doi: 10.1056/NEJMc2004973
9. Codex Alimentarius. Food hygiene: Basic texts http://www.fao.org/3/a1552e/a1552e00.pdf
10. U.S. Food and Drug Administration (FDA) Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic
11. https://www.compoundchem.com/tag/covid-19/
12. https://www.cdc.gov/foodsafety/keep-food-safe.html

TÜV AUSTRIA

