HACCP-Based Hygiene Control Plan



Revision History

Revision date	Revision details/background	Approved by
May 28, 2021	Created this document in line with the institutionalization of the HACCP system on June 1, 2021.	
December 5, 2023	Update on labeling requirements for allergenic substance "walnut" due to legal revision March 9, 2023	Kuze
		HACCP system on June 1, 2021. Update on labeling requirements for allergenic substance

Table of Contents

Introduction	4
Background	5
(1) Food poisoning and three key risk types	6
(2) HACCP: Risk reduction mechanism	10
Chapter 1 Ingredient Quality Control Standards—From Ingredient Origins to Processing Plants—.	12
(1) Prohibited items and acceptance/monitoring standards	13
(2) Plant audit standards	15
(3) Ingredient purchasing process	16
(4) Ingredients requiring management in the downstream process	18
Chapter 2 Product Quality Control Standards—From Production to Sales—	19
(1) Management system	20
Required preparations	20
2. Employee training	22
3. Reviews and revisions	23
4. Emergency responses	25
(2) Worker management	27
1. Appearance	27
2. Health management	28
3. Hand and finger hygiene	30
(3) Process management	31
1. Design	31
2. Ingredient acceptance and storage	33
3. Shelf life management	35
4. Process management	36
5. Regular reset	39
6. Delivery and sale	40
(4) Management framework	41
1. Management framework	41
2. 5S methodology	44

Introduction

♦ FOOD & LIFE COMPANIES' approach to food safety and reliability

Our group's goal for the future is reflected in our slogan of "Discovering new tastiness, Sharing moments of joy."

To achieve this goal, we chose to adopt "Dedicated/single-minded sincerity" as one of the pillars of our guiding principles in line with the following belief.

"Our priority is the safety and well-being of people and the environment."

Throughout our entire supply chain from ingredient procurement to product delivery, we are committed to ensuring the health, safety, and confidence of our customers in relation to using our products and tackling global environmental issues.

♦ Quality assurance systems based on the HACCP approach



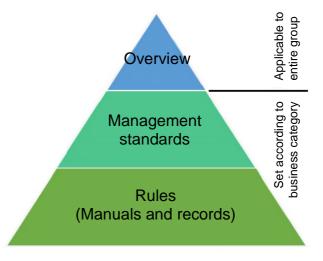
The basic approach adopted in the Hazard Analysis and Critical Control Point (HACCP) system involves analyzing the location and nature of risks in all of the processes from ingredient procurement to product delivery, planning process management on a phase-by-phase basis to avoid such risks, continuously checking and visualizing the risk management and avoidance status, implementing corrective measures in the event of a problem, and revising the plan where necessary.

We intend to manage our entire supply chain in line with this approach.

♦ HACCP-Based Hygiene Control Plan

This document provides an overview of our group's quality assurance system and outlines the management standards for each phase.

The relevant rules are described in detail in each manual and record.



Background

(1) Food poisoning and three key risk types

♦ Food poisoning

Food is the source of life. At the same time, it adds joy to our daily lives.

However, the consumption of food can also threaten our lives or health.

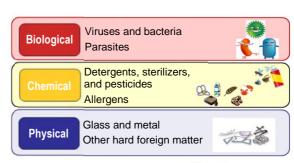
Damage to your health caused by consuming food that contains or has been in contact with hazardous substances is called food poisoning. Its symptoms vary, but it can cause a sequela or, in the worst-case scenario, death.

Each and every one of us must remain fully aware that working with food means being responsible for the lives of our customers.

♦ Three key risk types

The risks to watch out for when handling food can be divided into three categories: biological risks, chemical risks, and physical risks.

Biological risks are caused by dangerous living organisms, chemical risks are caused by dangerous ingredients, and physical risks are caused by dangerous foreign matter.





Biological: Viruses

O Characteristics

Viruses are small living organisms that cannot be seen with the naked eye. They infect people and animals by reproducing inside their bodies. After multiplying inside the host's body, they spread to new hosts via food, objects, and/or air.

One example of these organisms is norovirus, which reproduces inside the human intestine. Once infected, the host experiences symptoms such as diarrhea, vomiting, and/or fever following an incubation period of 24 to 48 hours. Infection may be asymptomatic, so people may spread the virus without even realizing that they have it.

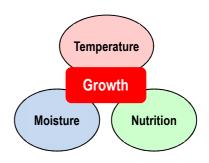
If an individual who is infected with norovirus works with food, the virus that they carry on their hands will contaminate the food, causing food poisoning. If virus-contaminated feces or vomit are not disposed of appropriately and particles disperse into the air, infection will spread through the air.

A virus that reproduces in the human intestine is excreted as feces, which may be discharged into a river before flowing to the sea. Eventually, the virus accumulates in the intestinal canal of bivalves, such as oysters. Therefore, eating raw clams also causes food poisoning.

Biological: Bacteria

O Characteristics

Bacteria are also small living organisms that cannot be seen with the naked eye. They multiply by division in environments that meet certain temperature, moisture, and nutrition criteria. Food poisoning occurs when an individual eats food containing bacteria that is hazardous to the human body.



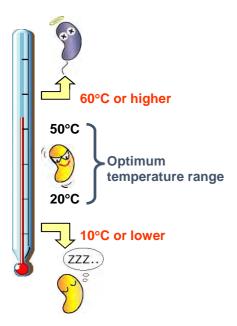
Various types of bacteria can cause food poisoning, but the ingredients that cause it, the incubation period, and the symptoms vary greatly. In any case, it is important that we take comprehensive countermeasures because dangerous bacteria, such as enterohemorrhagic E. coli (e.g., O-157), can cause severe symptoms and even result in death.

The range of temperatures that are suitable for bacterial growth is generally 10°C to 60°C. Bacteria die at high temperatures and become inactive at low temperatures. The basic strategy, therefore, is to restrict bacterial growth by managing food at low temperatures and kill bacteria by heating them.

Note, however, that this strategy alone is insufficient to kill some types of bacteria. For example, some types can cause food poisoning even if they are few in number, while others can multiply at low temperatures, survive high temperatures, or even produce heat-resistant toxins. For this reason, it is important that we manage food appropriately throughout the entire production process.

If food production does not involve a heating process, appropriate measures must be implemented to address the properties of high-risk bacteria and foods. Such measures include washing the food with a chemical to disinfect it, drying the food, reducing water activity by sugaring or salting the food, controlling the food's pH level, or using food additives.

Bacteria and temperature



Biological: Parasites

O Characteristics



Parasites are living organisms that live (parasitically) in or on humans, other animals, or plants. Food poisoning occurs when food contaminated with a parasite that is harmful to the human body is eaten.

Different food types (e.g., seafood, meat, vegetables, fruits, and water) are vulnerable to different types of high-risk parasites, but there are three basic methods for preventing food poisoning: wash, freeze, and avoid eating raw.

In the pursuit of tastiness, however, we want our customers to be able to enjoy fresh raw food that has not been frozen. This means, however, that we have to accept the risks associated with parasites such as *Anisakis* and *Kudoa septempunctata* when we handle seafood, for example.

To ensure tastiness without compromising on food safety, it is necessary to implement appropriate countermeasures, such as ensuring careful production site selection and farm management, purchasing fresh ingredients and processing them quickly, and removing parasites through product inspections.

Chemical: Allergens

O Characteristics

Food allergies occur when the body mistakes a certain type of food for foreign matter, causing an overreaction of the immune system. Typical symptoms include a rash, stomach ache, and difficulty breathing. If the whole-body symptoms referred to as "anaphylactic shock" occurs, these symptoms can quickly worsen and even result in death.

To allow people with allergies to choose food without having to worry about their condition, various countries have enacted rules that require allergenic ingredients be indicated on labels. For example, the Japanese Food Labeling Act requires that labels identify the following eight ingredients as specific raw materials that may be allergenic: shrimp, crab, wheat, milk, eggs, buckwheat, peanuts, and walnuts. It also recommends that labels identify 20 other ingredients that cause allergic reactions less frequently than the specific raw materials.

When products with allergen warning labels or products with publicly available information (e.g., information disclosed on a website) are sold, any discrepancy between the information provided and the allergens actually contained in the food could result in a fatal accident. Therefore, if incorrect labelling or contamination during manufacturing is discovered, sales must be suspended immediately, an announcement must be made, and the product must be recalled.

In food businesses (e.g., restaurants) and face-to-face sales where products are sold without the use of an allergen warning label or the public disclosure of allergen information, an incident may occur if the seller responds carelessly to a customer inquiry. Therefore, it is essential that such information be handled as required under the rules.

Chemical: Chemicals

O Characteristics





Chemicals are used at facilities where food is handled. Their uses include washing, cleaning, disinfection, and insect control.

Food poisoning can occur if these chemicals enter the food. Since some chemicals are poisonous, they may even cause a fatal accident.

The key to preventing such accidents is to manage the chemicals appropriately.

You need to know what chemicals are being used in the facility and store them in the designated locations in dedicated containers. In the case of poisons, you must also check whether they are removed from the facility and manage their inventories.

It is also important that you visualize the purpose and method of the chemical use in order to prevent any chemicals from contaminating the food due to incorrect usage.

Physical: Foreign matter

O Characteristics

Any object that is inadvertently introduced into the food is referred to as "foreign matter."

If the food contains a hard or sharp object (e.g., a shard of metal or glass), the person who eats it may suffer an injury to their mouth, break a tooth, or, in the worst-case scenario, swallow it and damage an internal organ.

Even if the foreign matter does not cause an injury, a customer who consumes food containing an unclean object (e.g., a cockroach or other type of pest) will not only be disgusted and shocked but may also share their experience on social media. This could then develop into a situation that threatens the continuity of the corporate group.

To prevent foreign matter from entering food, it is essential that we keep the environment clean by inspecting the cooking equipment, utensils, and containers, carrying out facility maintenance, and implementing pest control measures.

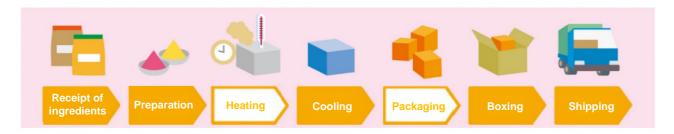
(2) HACCP: Risk reduction mechanism

Process management based on the HACCP approach for risk reduction

What is HACCP?

Hazard Analysis and Critical Control Point (HACCP) is a system that is used to analyze when and why the three risks described earlier (biological, chemical, and physical) may occur during the processes from ingredient procurement to product delivery, decide on the types of risk mitigation measures to be implemented and the schedule for doing so, and then actually implement such measures.

Our group conducts HACCP-based process management throughout all of the processes from ingredient procurement to product delivery while also referring to CODEX HACCP and various hygiene control manuals created by industry groups in accordance with the size of the relevant business category, the type of food that is handled, and the form of sale.



Key point!

General hygiene control

In HACCP-based process management, the first and most important step is general hygiene control, which involves conducting hygiene management for food handlers, places, utensils, and ingredients.

For business categories involving the handling of raw food in particular, setting clear risk mitigation measures (critical control points) can often be difficult. Therefore, general hygiene control is the core activity.

HACCP

Whole process management (Critical control points for a perfect finish!)

General hygiene control

Management of personnel, site, tools, and ingredients (e.g., individual hygiene controls, 5S, and pest control)

Basic approach to risk reduction

- 1. Do not introduce risks.
 - Prohibit employees from working if they do not feel well and may have contracted a viral or bacterial infection.

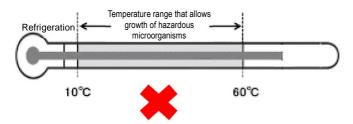
· Prohibit employees from bringing in dirty or dangerous objects.



- Do not let risks escalate.
 - · Low-temperature management.
 - Shelf life management.



Quickly adjust the temperature to outside the risk range.



- Do not transfer risks.
 - Wash (hands, utensils, machines, etc.).
 - Cover food.



- - Wash and disinfect unprocessed ingredients.
 - Apply heat.
 - Reset the work setup regularly



5. 5S methodology

Sort Remove all unnecessary items. Set in Store items properly in designated areas. order **Shine** Clean the workplace. Standardize Keep the workplace clean. Make processes into a habit. Sustain

Chapter 1 Ingredient Quality Control Standards

—From Ingredient Origins to Processing Plants—

If a contaminated ingredient is used, the contaminant may cause food poisoning.

To prevent food poisoning, we have adopted quality control standards for the ingredients that our group uses.

When purchasing an ingredient, check its freshness and tastiness and confirm that it meets these standards.

Ingredient Quality Control Standards

(1) Prohibited items and acceptance/ monitoring standards

Explanation

The basic approach involves eliminating risks in the ingredients stage if they cannot be eliminated in the downstream process. However, if it is determined that the risks cannot be eliminated in either the ingredients stage or the downstream process, they must be eliminated by imposing restrictions on their use or implementing acceptance standards.

Control standards

1)	Pro	hibite	ed ite	ms
----	-----	--------	--------	----

Food that poses a high risk of food poisoning from cross-contamination in the downstream
process because of difficulties associated with setting aside work areas or allocating sufficient
time.
Foods designated by the national or local government as prohibited or ingredients designated

- as restricted.
- ☐ Food that cannot be handled due to a failure to obtain a business license, meet facility standards, or acquire required qualifications.
 - *Prohibited items must be set according to the characteristics of the relevant business category. *The manager makes the final decision taking into account the severity and possible extent of harm.

2) Acceptance/monitoring standards

Acceptance standards: Purchase, use, and sale criteria

- ☐ In principle, the standards of the country of sale (e.g., food hygiene law and health code) must be followed. Note, however, that a company must establish its own standards for each business category if the standards of the country of sale will not eliminate risks in the downstream process, resulting in a high likelihood of a food poisoning incident.
- ☐ The purchase, use, and sale of items must be suspended if the manufacturer's shipping standards or ingredient testing results deviate from the acceptance standards.
 - * The final acceptance decision (pass/fail) is based on the results of the ingredient testing carried out by an ISO 17025-certified testing body or a national registered testing body using the method specified in the national standards.

Monitoring standards: Standards for identifying quality and process variations

- ☐ Standards must be set in order to determine whether food is being produced stably in a hygienic environment or to handle food that needs to be monitored even though no acceptance standards have been established for it.
- ☐ If it is determined that a deviation from the standards will not result in the suspension of the purchase, use, or sale of the food but there are still risks present, request a cause investigation and improvement report and then conduct a plant audit to study the situation.

*The following are our main in-house standards.

Bacteria capable of causing food poisoning	Background to the establishment of the standards
Vibrio parahaemolyticus	This bacterium multiplies rapidly so there is a high probability of it causing food poisoning if the food remains uneaten for a long time. Therefore, for business categories with many take-out customers, negative criteria must be set for high-risk ingredients that will be consumed raw.
Escherichia coli	This bacterium can be removed by hygienic processing, but it cannot be removed in the downstream process if ingredients that will be consumed raw are contaminated. Therefore, negative criteria must be set for high-risk ingredients that will be consumed raw.
Listeria	This bacterium can multiply below the standard temperature of a refrigerator (10°C or lower), so low-temperature food management measures in stores cannot prevent <i>Listeria</i> growth. Therefore, negative criteria must be set for high-risk ingredients that will be consumed raw.

Ingredient Quality Control Standards

(2) Plant audit standards

Explanation

To ensure ingredient safety, the manufacturer must adopt appropriate management measures. For this reason, plant audit standards are set to check for problems in the management systems employed at ingredient processing plants and to determine whether general hygiene controls and the HACCP approach are being implemented properly.

Control standards

1) Plant audit items and pass/fail criteria

Plant audit items

- ☐ Check the entire process from the receipt of ingredients through to manufacturing, shipping, storage, and delivery.
- ☐ Check our requirements for the subject plant based on ISO 22000.
- ☐ Assess each audit item by conducting visual observations, interviews, ledger checks, and ingredient testing.
- □ To ensure that our requirements are not too demanding for small business operators, assess each audit item based on whether they meet the HACCP requirements under the Food Sanitation Act (if food is managed in line with hygiene control manuals created by industry groups) or while taking into consideration the impact of our requirements on their final products.

Pass/fail criteria

- ☐ The overall quality control implementation status is indicated according to a scoring system (0–100).
 - Depending on the score that is assigned, decide which of the following applies: transactions with the audited plant are permitted, transactions with the audited plant are permitted only for a limited period, or transactions with the audited plant are prohibited.
- ☐ The audited plant's ability to meet our requirements (which could lead to serious issues if unmet) is indicated according to a risk rating scheme (A–D).
 - If a risk rating of D is assigned, the group will only enter into business with the audited plant after confirming that it has implemented corrective actions to address the issues in question.

*Score and assessment

Score	Assessment
80 points or higher	Transactions permitted
70 to 79 points	Transactions permitted only for a limited period
Below 70 points	Transactions prohibited

*Risk rating and response

Risk rating	Response
A: Good	_
B: Minor issues detected	_
C: Issues detected	_
D: Serious issues detected	Requires correction

Explanation

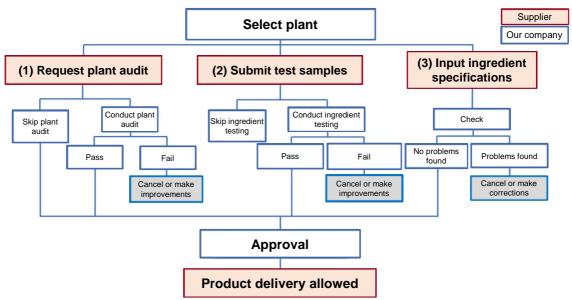
When purchasing an ingredient, confirm that it is not a prohibited item and that it meets both the acceptance standards and the plant audit standards. Only purchase the ingredient if all of the standards are met.

The pre-purchase criteria should be decided taking into consideration the ingredient risks and the supplier's management level.

Control standards

1) Processes from plant selection to approval

- ☐ Confirm that there are no issues in relation to the plant audit, the ingredient testing, and the ingredient specification information (data chart).
 - * The plant audit and ingredient testing may be skipped depending on the product classification, the ingredient risk, and the supplier's management level.



2) Plant audits

Performance of an audit

☐ The decision as to whether an audit should be carried out must be taken based on the requirements (product classification), the ingredient risk (processing status), the plant's management level (certification), and the supplier's management level.

O: Subject to audit \triangle : Subject to audit if supplier's management level is low \rightarrow : Not subject to audit \Rightarrow : Must be checked for direct transactions

	Flant's management level is low					
Product classification	Processing state	ISO 22000 and GFSI (FSSC 22000, BRC, IFS, and SQF) certification	CODEX HACCP certification	HACCP institutionalization by government	N/A	
Original state	Unprocessed (*includes freezing)	-	_	-	-	
NB product	Non-thermal/ thermal processing	-	_	-	_	
	Non-thermal processing	<u>*</u>	Δ	Δ	0	
LB product PB product	Thermal processing (before packaging)		☆	Δ	Δ	
i b product	Thermal processing		-	⋨	Δ	

Product classification

NB product: A product planned by the manufacturer that is distributed throughout the

country.

LB product: A product planned by the manufacturer that is distributed only in limited areas

or a product for which we are the main purchaser.

PB product: A product that was planned with our cooperation.

Supplier's management level

High: The Quality Control Department is highly professional, and it regularly audits and

provides guidance to the audited plant.

Low: The Quality Control Department is highly professional, but it does not manage the

audited plant.

The supplier does not have a Quality Control Department or its Quality Control Department is not very professional.

3) Ingredient testing

☐ When a new ingredient is purchased, ingredient testing must be carried out by our designated testing body. Purchases of the new ingredient will be allowed only after it has been confirmed to meet both the standards that apply in the country of sale and our own acceptance standards.

- * Ingredient testing may be skipped depending on the product classification, the ingredient risk, or other factors.
- ☐ If the tested ingredient does not conform to the monitoring standards, a cause investigation must be conducted. Where necessary, the investigation results should be reflected in the ingredient shelf life, recipe, and process chart. The ingredient will be checked in regular audits or other inspection opportunities.

4) Ingredient specification information

- Approve the ingredient specification information after confirming that it meets both the national standards and our own acceptance standards.
 - Basic information
 - Traceability information
 - Information that is required for the creation of food labels and the disclosure of quality information (e.g., details concerning raw materials, additives, allergens, and nutritional components)
 - Information that is required for to ascertain hygiene risks and other risks (e.g., details concerning the manufacturing process, shipment standards, and test results)
 - * The details that must be included in the ingredient specification information is determined taking into account the form of sale (whether it is necessary to affix a label) and the necessity to disclose quality information.

Key point!

<u>Direct trading (process undertaken by our group to directly purchase and import products)</u>

- 1. Plant audit
- 2. Ingredient specification information (e.g., flow diagram, production QC process, recipes, product specifications, ingredient specifications, plant shipment standards, and best-before date assurance data)
- 3. Creation of a food label
- 4. Creation of spec sheet and signing of a sales agreement
- 5. Prototyping (attend the operation), testing by an independent testing body, and start of production after the tests have been passed
- 6. Production (attend the operation) and product exports after the tests conducted by a testing body designated by the Japanese government have been passed
- 7. Registration of data in the ingredient specification management system
- 8. Customs clearance

Ingredient Quality Control Standards

(4) Ingredients requiring management in the downstream process

Explanation

Risks that cannot be managed in the downstream process must be managed in the ingredients stage. Conversely, risks that cannot be managed in the ingredients stage must be managed in the downstream process.

This section describes ingredients that require particular care.

Control standards

1) Ingredient processing status and management phase

□ Unprocessed ingredients (original state) and uncooked ingredients that are scheduled to be cooked in the downstream process (non-thermal processing [for cooking]) may have been in contact with food poisoning bacteria. Therefore, they must be managed in the downstream process.

Processing state	Managed in ingredients stage	Managed in downstream process
Original state		0
Non-thermal processing (for cooking)		0
Non-thermal processing (to be eaten raw)	0	
Thermal processing	0	

2) Ingredients that require particular care in the downstream process

- ☐ The risk mitigation method must be clearly described in the recipe or process chart for the ingredients listed below.
 - Clearly describe the washing, disinfection, and heating requirements.
 - Use different utensils and containers when washing and disinfecting ingredients or before and after heating.
 - Wash your hands, change your gloves, or reset the work areas when washing and disinfecting ingredients or before and after heating.

Item	Risk factor (reason)	Management method	
Seafood in original state	Vibrio parahaemolyticus	Specify the washing conditions in the recipe. Follow the recipe. Set aside a place and time for preparation.	
Uncooked seafood (for refrigeration or eating raw)	Parasite: Anisakis	Visually check and remove it.	
Uncooked seafood (for cooking)	Vibrio parahaemolyticus	Specify the heating conditions in the recipe. Follow the recipe.	
Vegetable in original state	Escherichia coli	Wash and disinfect the vegetable or cook it as instructed in the manual. Follow the recipe. Set aside a place and time for preparation.	
Uncooked vegetable (for cooking)	Escherichia coli	Specify the heating conditions in the recipe. Follow the recipe.	
Uncooked livestock meat (for cooking) Escherichia coli Salmonella Campylobacter Specify the heating conditions in the recipe. Follow the recipe. Set aside a place and time for preparation.		Follow the recipe.	
Eggs in shell Salmonella Specify the heating and cooling conditions in the Follow the recipe.		Specify the heating and cooling conditions in the recipe. Follow the recipe.	

Chapter 2 Product Quality Control Standards

—From Production to Sales—

The previous chapter of this document explained the mechanism for purchasing safe ingredients. However, even if safe ingredients are purchased, a food poisoning incident may still occur if insufficient ingredient management during production and sales allows matter that can cause food poisoning to come into contact with the ingredients or multiply on them.

This chapter explains the responsibilities of our group store workers and plant workers.

Product Quality Control Standards

(1)-1 Management system: Required preparations

Explanation

Food has an influence on people's lives and their health. Therefore, the national and local governments manage food through various laws and regulations.

Failure to observe these laws and regulations not only heightens the probability of an accident but also causes management to suffer severe damage as a result of being punished for violating a law regulation or having this violation exposed to the public.

Control standards

1) Acquisition and renewal of operating permit

Acquisition of operating permit

- ☐ Confirm which type of permit or notification is required for the type of food to be handled and the form of sale.
- ☐ Submit the necessary operating permit application forms and notifications.
- ☐ Once the operating permit has been issued, display it in a visible location inside the place of business.
 - * Submit the application forms well in advance.
 - * Bring the facility plan to the public health center for consultation before construction work begins.

Renewal of operating permit

- ☐ Renew the permit by submitting the necessary paperwork to the public health center approximately one month before it expires.
- ☐ An operating permit may need to be reacquired or modified in the following circumstances. Check with the public health center.
 - The place of business is moved.
 - The equipment or layout is changed.
 - The place of business is moved.
 - Changing the business operator or corporate form.

Why? Operating permit requirements

The scope of an operating permit and its acquisition criteria are established by law. The handling of non-permitted food or the conducting of business in the form of sales that have not been permitted constitute a violation of the law.

It should also be noted that making changes without permission to the equipment or the layouts shown in the drawings submitted in the permit application is prohibited.

	Do not han not been pe	ing permit and observation of requirements dle non-permitted food and do not conduct business in the form of sales that have ermitted. nge the equipment or layout without permission.	
		e manager certification and notification to the public health center	
	 on the lecture that must be successfully completed to obtain certification as a food hyginanager and apply to participate. Participate in the lecture and other required events. * Qualified nutritionists, cooks, and the like do not need to participate in this lecture. 		
	If a food hygiene manager is transferred, leaves the company, or takes a leave of absence Designate a new food hygiene manager and submit a notice of change to the local public health center!		
Res	Manage an Promote in complaints. Obtain information	rmation on the revision or repeal of laws, regulations, and rules, communicate such to employees, and work to ensure that applicable laws, regulations, and rules are	
	Key point!	Displaying the operating permit certificate and the food hygiene manager plate Display them in a highly visible location!	
	Note!	Opening a store in a new country The permits, facility standards, and qualifications that are required for the operation of a business vary according to the country. When opening a store in a new country, study the local laws, regulations, and standards and act accordingly.	
Ма	nagement	of HACCP-related documents	
	Know where Know where Manuals the	e the HACCP-Based Hygiene Control Plan is stored. e related manuals are stored. at are required to be kept on display must be posted in locations where it will be easy ees to refer to them while carrying out the work described in them.	

☐ Record sheets must be kept in locations that the employees who use them can easily access.

☐ Record sheets and documents that require storage must be stored for a specified period of time.

2)

3)

* Display the latest manuals.

* Use the latest record sheets.

Product Quality Control Standards

(1)-2 Management system: Employee training

Explanation

All hygiene-related rules are established to prevent food poisoning incidents.

However, employees cannot follow these rules if they are not aware of them.

Managers must learn about hygiene and provide employee training when necessary.

Control standards

1) Training for new employees

- ☐ Hold an orientation session for new employees and provide them with the necessary information
- On their first day of work, brief new employees and provide them with OJT on their appearance, what to do if they feel unwell, hand washing, how to use the toilet, and basic rules on hygiene.
- ☐ Check on new employees frequently. Each time they encounter a problem, provide them with information and OJT accordingly.
 - * For employees who speak a different language, communicate information and provide OJT in creative ways, such as using an interpreter or providing illustrations.

2) Regular training

- In circumstances such as the following, provide employee training where necessary.
 - When rules change.
 - When the Hygiene Management Newsletter is issued.
 - If it is necessary to call something to the employees' attention because a dangerous incident or close call has occurred.

Key point!

Hygiene Management Newsletter

Our group periodically publishes the Hygiene Management Newsletter. This is done when the season changes or in accordance with the hygiene status of our group store or plant.

At morning meetings, the Hygiene Management Newsletter should be used to ensure that matters such as the importance of hygiene control and the background to the hygiene rules are communicated effectively.

All employees must take tests to check their understanding of hygiene.

Managers must check the test results and provide individual guidance to employees who do not have a correct understanding of hygiene.





Chapter 2

Product Quality Control Standards

(1)-3 Management system: Reviews and revisions

Explanation

If managers demonstrate leadership on hygiene control, employees will recognize the importance of hygiene and become more motivated to observe the rules. You should routinely check the situation and carry out the necessary activities.

The Quality Control Office will make revisions and corrections where necessary in response to changes in the onsite status and the external environment.

Control standards

1) Routine checks and improvement activities

- ☐ Managers must regularly check for hygiene-related problems by inspecting records, conducting visual observations and holding employee interviews.
- ☐ If any problems are detected, action must be quickly taken to resolve the matter.
 - * Managers are responsible for checking the hygiene status.

Item	Method	Task
Health check table	Check records	Confirm that checks have been completed and no unwell employees are working. After that, sign the table.
Hygiene management record sheet		Confirm that records are being kept appropriately, no deviations from standards have occurred, and no problems have arisen. After that, sign the sheet.
Worker management	Conduct visual observations Hold interviews	Check whether employees understand and follow the rules about matters such as their appearance, what to do if they feel unwell, how to use the toilet, and when and how to wash their hands.
Process management		Check whether employees understand and follow the important rules for each stage of the process, from ingredient acceptance through to product provision, delivery, and sales.
Area and utensil management		Check whether washing, cleaning, and disinfection are being conducted as scheduled and confirm that there are no issues with the implementation status.
		Check that no damage has occurred that would allow foreign matter to enter the food or that would allow pests to enter the facility and reproduce. Interview employees and check the work reports provided by pest exterminators to confirm that there are no pests in the facility and that the relevant measures are being completed.
Emergency response and reporting		Check whether employees understand how to respond to emergencies, such as an employee vomiting, an urgent customer inquiry, or a report from a customer about feeling unwell or contamination by foreign matter.

2) Regular diagnosis and improvement activities

Responsibilities of the Quality Control Office

- ☐ Plan and implement regular audits in order to check whether group shops and plants are being managed in line with the HACCP-Based Hygiene Control Plan.
- Rate audit results according to the following four levels based on the risks: white, yellow, red, and black.
- ☐ Consider reviews of the HACCP-Based Hygiene Control Plan and various manuals and records in accordance with the situation.
 - When the office reviews the HACCP-Based Hygiene Control Plan and various manuals and records, it holds discussions with the relevant departments, drafts the revisions, and then makes the revisions after obtaining approval at the management meeting.

Note! **Environmental tests**

To confirm that the production sites are being kept clean, the Quality Control Office conducts regular tests at the same time as the audits. These tests include the following.

• ATP test: Conduct an examination to identify residues of impurities (organic).

Check whether employees are washing their hands and utensils properly.

Conduct an examination to identify bacteria in the area, on utensils, on Bacteria test:

ingredients, and in the air.

Check whether the following guidance is being implemented properly: "Do not introduce risks," "Do not transfer risks," "Do not let risks escalate" and "Eliminate risks." Test the air to check whether air conditioners and air intake and exhaust systems are being managed properly so that there are no bacteria or mold spores present in the air at production sites.

Responsibilities of stores and plants

- ☐ Conduct self-checks before an audit to confirm that they are following the rules.
- ☐ Implement improvement activities in accordance with the steps below after receiving the audit report.
 - Analyze the cause of any underperformance in areas subject to negative feedback.
 - Develop an improvement plan.
 - Explain to the employees the current situation and the improvement plan to be implemented.
 - Check the implementation status.
- ☐ Follow the instructions issued by the Quality Control Office and submit an improvement report if a serious problem is identified.

3) Reviews and revisions

- ☐ Quality Control Office managers provide reports on the following at management meetings.
 - Sharing of activity policies, goals, and plans.
 - Sharing of the hygiene status, outcomes, and future tasks.
 - Sharing of information on matters such as changes in the external environment (e.g., laws and regulations).
 - Submission of suggestions concerning reviews of the HACCP-Based Hygiene Control Plan and various manuals and records.

Cha	oter	2
Oliu	PiOi	_

Product Quality Control Standards

(1)-4 Management system: Emergency responses

Explanation

No matter how strictly we implement preventive measures, unexpected incidents may still occur. If an incident occurs, report it immediately. The company as a whole must take whatever measures are necessary to minimize any potential damage.

Control standards

1) Incidents that require an emergency response

Category	tegory Description Particularly high-risk situation	
Food poisoning Risk of contamination	Virus/bacterium	Multiple incidences of health hazard due to an ingredient
by hazardous matter	Parasite	Health hazard
	Poison (e.g., detergent or disinfectant)	Health hazard due to an ingredient
	Allergen	Health hazard due to an ingredient
	Dangerous matter (e.g., glass or metal)	Health hazard due to an ingredient
	Other	High-impact event
Group infection Risk of infection	Group infection of employees and/or food poisoning	Infection spread to customers and site inspection conducted by the public health center
	Vomiting in a store or plant	Events such as vomiting occur at a production site or conveyor belt
	Other	High-impact event
Incorrect labelling	Raw materials	Allergen information omitted
	Expiry or best-before date	Label indicates a longer period than the actual period
	Method of storage	Label indicates a higher temperature range than the actual range
	Other	High-impact event

2) Process for daily reporting

Store and plant managers must continue enhancing the work environment to enable employees
to report any abnormal events quickly.
Employees must report any abnormal incidents to their managers quickly.
Managers must fact-check reports from employees.
Managers must respond to each case in accordance with the rules.
Where necessary, managers must record the incident details and response.
Where necessary, managers must report the incident to the relevant departments through the
workflow.

Pro	ocess for reporting an emergency incident
	Store and plant managers must submit the first report to their direct superior and the Quality Control Office without delay if an incident that requires an emergency response occurs.
	The Quality Control Office coordinator checks the situation and reports the incident to the Quality Control Office manager.
	 The Quality Control Office manager reports the incident to the president and explains the facts that have been determined so far as well as the following possibilities and necessities. Possibility of death or severe illness Possibility of escalation of damage Necessity to carry out emergency responses, including suspension of business operations, augmention of sales, release of engagement, and product recall.
	suspension of sales, release of announcement, and product recall
	 Necessity to cooperate with the supervisory agency Necessity to carry out company-wide responses not listed above
Em	nergency response
	The president must decide if the incident in question meets the criteria for a crisis and issue a response order accordingly.
	• If the criteria are met: An emergency meeting of the Internal Control Committee is held, a decision is taken on the response strategy, and a task force is formed
	If the criteria are not met: The responsible department leads the response
	The Quality Control Office manager proposes emergency measures (e.g., suspension of business operations, suspension of sales, release of announcement, and product recall) that will need to be taken to prevent any escalation of damage.
	The Quality Control Office manager negotiates with the supervisory agency to contain the situation.
	The Quality Control Office manager conducts an investigation, collects information, and shares it with the relevant departments.
	The Quality Control Office manager works with the relevant departments to implement measures necessary to contain the situation.
Ca	use investigations and recurrence prevention measures
	The Quality Control Office investigates the cause of the incident that has occurred. The Quality Control Office proposes and implements measures that will need to be taken to prevent a recurrence.

5)

- 0
 - Where necessary, the office must review documents such as the HACCP-Based Hygiene Control Plan, control standards, manuals, and records.

6) Effectiveness assessments

3)

4)

Ш	The Quality Control Office checks whether the recurrence prevention measures are working
	effectively and being implemented consistently.
	Where necessary, the recurrence prevention measures must be reviewed.

Product Quality Control Standards

(2)-1 Worker management: Appearance

Explanation

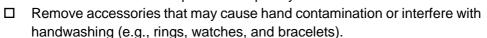
Appearance is an important consideration for food handlers in terms of hygiene control and the customer's impression of them.

Try to maintain a clean appearance and observe the rules fully.

Control standards

1) Appearance

- ☐ Keep your fingernails short.
- ☐ Change your shoes.
- ☐ Change and wash your uniform in accordance with the specified frequency.



☐ Adhere to any other appearance rules set by the store or plant.



2) Items prohibited at the production site

- □ Set rules concerning items that are prohibited at the production site to ensure that employees do not bring the following into the production site: dangerous items, unsanitary items, or items that may give rise to foreign matter.
- ☐ Employees must not bring prohibited items into the production site.

3) Use of a lint roller

☐ Use a lint roller or other cleaning utensil to remove hair or dust from your cap or uniform where necessary.

4) Use of gloves

- ☐ When handling final products, ingredients for food to be eaten raw, or other such food items, employees must wear gloves where necessary.
- ☐ Employees must wear gloves during work that involves touching ingredients if any part of their hands or fingers are cut or chapped.
 - * Put on gloves after cleaning your hands by washing them.

5) Removal of uniform when using (or cleaning) the toilet

Remove any parts of your uniform that may become contaminated when using (or cleaning) the toilet (e.g., apron and sleeves).



Product Quality Control Standards

(2)-2 Worker management: Health management

Explanation

An employee who feels unwell may have been exposed to a bacterium or virus that can cause food poisoning. Since bacteria and viruses cannot be seen with the naked eye, you may contaminate food without even realizing it. Health management is important to avoid bacteria or viruses being brought into the production site.

Control standards

1) Feces examination, health certificate, etc.

- ☐ All examinations (e.g., feces examinations, health checkups, and blood tests) that are required by law must be conducted. If a problem is identified, address the problem in accordance with the applicable laws or rules.
- ☐ Managers must check the implementation status of the examinations.
- □ Necessary records must be stored.

Note! Feces examination

The Japanese Sanitary Management Manual for Large Cooking Facilities requires regular health checkups and feces examinations for enterohemorrhagic *Escherichia coli* and norovirus.

To reduce the risk of employees coming to work while infected with a virus or bacterium that can cause food poisoning, our group (in Japan) requires its employees to take regular feces examinations to check for Category III food poisoning bacteria as specified in the Infectious Disease Control Law and feces examinations for norovirus if they are feeling unwell.

2) Contacting your workplace when feeling unwell

- ☐ Employees who feel unwell (e.g., those suffering from diarrhea, vomiting, or fever [37°C or higher]) must phone the store or plant and avoid going to work.
- □ Even employees who have no symptoms must phone the store or plant and avoid going to work if they have contracted an infectious disease and are instructed by a hospital or administrative agency to stay home.









3)	Ch	ecking an employee's health	
		Check the employee's health before they start work. Record the confirmed information.	
		The manager confirms that the employee's health check has been performed and recorded appropriately and then signs the record sheet.	
4)	Res	sponding appropriately to an employee feeling unwell	
		If an employee contacts you to report feeling unwell, tell them not to come to work. If an employee says that they are feeling unwell during a health check or during work, tell them to go home and record this response.	
		Where necessary, instruct the unwell employee to submit a stool sample and allow them to return to work once they test negative.	
5)		ecking an employee's hands and fingers for cuts or roughness and responding propriately if they are cut or chapped	
		Check the employee's hands and fingers for cuts and roughness and then record the check results.	
	☐ If an employee has a cut or roughness on their hands and/or fingers, order them to apply company-designated bandages and put on company-designated gloves before they start work Alternatively, assign the employee to work that does not involve the handling of ingredients.		
		Record how the situation was handled.	
W	hy?		
		A bacterium that causes food poisoning, Staphylococcus aureus can be found on peoples' skin, nose, mouth, throat, hair, or other body parts. It is particularly concentrated on cuts and suppurating wounds.	
		Staphylococcus aureus multiplies and releases a toxin called enterotoxin. Eating food contaminated with this toxin causes violent vomiting and diarrhea.	
		Rules on handling cuts and roughness on hands or fingers are formulated to prevent Staphylococcus aureus from coming into contact with ingredients.	
6)	Die	sposing of vomit	
U)			
	<u> - </u>	ouse disposal of vomit Store vomit disposal sets and the disposal manual.	
		Let employees know where the vomit disposal sets are and the method of disposal. Why? Why is vomit disposal necessary?	

<u>ln-h</u>	ouse disposal of vomit Store vomit disposal sets and the disposal manu	ual.	
	Let employees know where the vomit disposal sets are and the method of disposal.	Why?	Why is vomit disposal necessary?
	Record the disposal of any vomit. The manager checks the implementation		Vomit may contain hazardous viruses or bacteria.
Out	status of the above three points. sourcing of the disposal		If the vomit is not disposed of quickly and appropriately, it may
	Prohibit entry into the area surrounding the vomit to prevent people from approaching it.		disperse or remain and cause the transmission of an infectious disease or food poisoning.
	Ventilate the area. Contact the disposal company to request disposal. The manager confirms that the disposal process.		
	that an employee vomited.		·

Product Quality Control Standards

(2)-3 Worker management: Hand and finger hygiene

Explanation

Hands and fingers are frequently contaminated with viruses or bacteria that cannot be seen with the naked eye. Failure to wash your hands correctly at the appropriate time can lead to ingredients being contaminated with a virus or bacterium, which may result in a food poisoning incident. Correct hand washing is the foundation of incident prevention.

Control standards

Install a sink that is to be used only for hand washing.
* Clarify the purpose of the sink.
* Do not use the sink for any other purpose.
Prepare the necessary equipment (i.e., water, soap, and dryer).
Keep the hand washing equipment hygienic.
Do not obstruct or place objects around the sink area. Make sure that the area is always
accessible for hand washing.
Display a hand washing manual.

2) Hand washing

- ☐ Ensure that employees know when to wash their hands.
 - When entering a room (after a break), after using (or cleaning) the toilet, and after disposing
 of vomit.
 - When moving from one area to another.
 - When shifting from high-risk work to low-risk work.
 - After touching a dirty item.
- ☐ Ensure that employees know how to wash their hands.
- ☐ Wash your hands as required by the rules.
- ☐ The manager conducts regular checks to confirm how employees wash their hands and provides guidance whenever a problem is identified.

Product Quality Control Standards

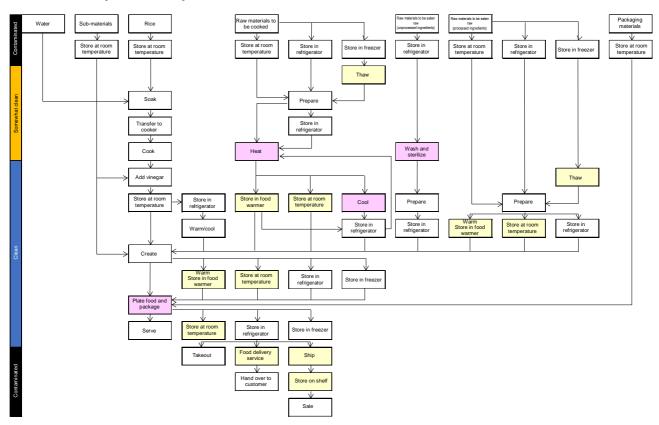
(3)-1 Process management: Design

Explanation

When developing or updating a product or launching a product in a new sales format, we need to analyze what risks are present, determine which processes (from ingredient acceptance to product delivery) they can be found in, and then put a suitable management method in place. For a particularly high-risk process, make sure that you clarify the control standards by using recipes and process charts.

Control standards

Overview of a production process



1) Creation of recipes and process charts

☐ Recipes, process charts, and other documents must be created where necessary to clarify the ingredients to be used and the points to be kept in mind.

2) Information requiring clarification

Ingredients to be used

☐ In businesses where allergen information must be disclosed or products must be sold with a food label affixed, clarify the ingredients to be used in order to prevent the use of incorrect ingredients.

Thawing food

- ☐ Set the temperature standards for the food item according to the risks that the ingredients pose.
 - * Guide: 10°C or lower (set while taking into account national legal standards and risks).
- □ Set a thawing method, time, and temperature that are guaranteed to meet the temperature standards for the food item. Set them to match the business category or the equipment used.
 - Thaw in a refrigerator
 - Thaw in running water, etc. (ideally, it should be possible to control the water temperature by, for example, using water circulating in a chiller)
- ☐ Use a timer or measure the temperature where necessary.

Disinfecting unprocessed ingredients to be eaten raw

- ☐ To use unprocessed ingredients to be eaten raw, set a disinfection method in accordance with the risks that the ingredients pose.
 - Vegetables and fruits: Disinfect using chemicals or by heating
 - Seafood: Wash in fresh water

Heating and cooling

- ☐ For products to be heated, check the temperature and time required to kill any microorganisms that pose risks in the ingredients where necessary. Also, consider the heating method and time required to guarantee the elimination of such microorganisms.
- ☐ If there is a risk that the product may contain a spore-forming bacterium, set a cooling method that allows the food to pass through the dangerous temperature range quickly.
 - * Guide: Reduce to 20°C within 30 minutes
- ☐ Where necessary, set a method for checking the appropriate heating and cooling at the production site.
 - Check the set temperature at the beginning and use a timer to set the time.
 - Visually check the appearance of the center of the ingredients at the beginning.
 - Measure and record the temperature at the center of the ingredients at the beginning.

60°C or higher 50°C Optimum temperature range 10°C or lower

Packaging

- ☐ When selling products with a food label affixed, consider what method should be used to check and record the labeling in order to prevent the wrong label being affixed or incorrect information being indicated.
- ☐ If there is a risk of quality degradation or bacteria growth due to a rise in temperature during delivery, consider what packaging style is required (e.g., attachment of cooling packs or use of cool bags).
- □ Set packaging style requirements other than those listed above in accordance with the product characteristics or the form of sale.

Product Quality Control Standards

(3)-2 Process management: Ingredient acceptance and storage

Explanation

Improper shipment of ingredients can result in quality degradation or bacteria growth. Furthermore, even if safe ingredients are delivered, they may go bad before they are used if they are stored improperly.

Carefully check that there are no problems with the delivered ingredients and store them appropriately.

Control standards

1) Acceptance inspection and storage

- ☐ Check the temperature, quantities, and appearance (e.g., damage, stains, or discoloration) when receiving ingredients.
- ☐ If a problem is identified, handle it in accordance with the rules and record details of the event.
- ☐ After the acceptance inspection has been completed, quickly store the ingredients in an appropriate temperature range.

2) Fixed-location storage, ingredient segregation, and first-in first-out

- Store ingredients in their designated locations.
- ☐ Segregate ingredients with different hygiene levels when storing them.
 - * Store them in a different location, at a different height, or in containers with a lid.
 - * When storing ingredients at different heights, store food with a high hygiene level (e.g., processed food and ingredients to be eaten raw) in a high location and food with a low hygiene level (e.g., unprocessed ingredients and ingredients to be cooked) in a low location.
- ☐ Practice first-in first-out when storing ingredients to avoid them expiring or rotting.

Note! What are ingredients with a low hygiene level (contaminated)?

 Ingredients that an unspecified number of people have touched (ingredients that came from a third party).







- 2. Unprocessed ingredients that have not yet been washed or disinfected.





3. Ingredients to be cooked before consumption.

Key point!

Key points for segregation

- Store in different locations.
- Store at different heights.
- Store in containers with a lid.







3) Hygienic storage

- ☐ Store ingredients, packaging materials, and utensils that come into contact with ingredients in a hygienic location.
- ☐ To avoid contamination, store ingredients in containers with a lid or cover them with a plastic wrap for protection.

4) Temperature checks for constant-temperature storage equipment (e.g., freezers and refrigerators)

- Periodically check the temperature of equipment that keeps ingredients at a constant temperature (e.g., freezers and refrigerators) to confirm that the appropriate temperature is being maintained.
 - * For machines that are turned off after business hours, turn them back on again before work and store ingredients in them once the reference temperature has been reached.
- ☐ Record the temperature check results.
- ☐ If the equipment temperature deviates from the reference temperature, respond to the situation in accordance with the rules and record how the situation was handled.
- ☐ The manager signs the record sheet after confirming that there were no problems with the response.

Key point!

Reference temperature

To prevent quality degradation and bacteria growth, a reference temperature that is appropriate for the relevant ingredients needs to be set.

As a basic rule, the reference temperature should be -15°C or lower for a freezer and 10°C or lower for a refrigerator. Note, however, that ingredients that discolor quickly (e.g., tuna and bonito) need to be kept at an ultra-low temperature. If a reference temperature is legally specified for certain ingredients, the equipment reference temperature needs to be set accordingly.

Check in advance the standards, characteristics, and risk factors for the ingredients to be handled.

Product Quality Control Standards

(3)-3 Process management: Shelf life management

Explanation

Ingredients deteriorate and bacteria multiply in them as time passes. Therefore, it is important for ingredients to be used and sold within their shelf lives. The use or sale of expired ingredients may have serious consequences, such as a food poisoning incident or product recall.

Control standards

1) Checking and recording of expiry and best-before dates

- ☐ Periodically check the shelf lives of stored ingredients to make sure that expired ingredients are not used or stored.
- ☐ If a product has an expiry date or best-before date recorded on it, check that the product has not expired before selling or shipping it.
- ☐ Record the expiry and best-before dates where necessary.

2) Checking and recording of use-by dates (management numbers)

- ☐ Clearly indicate a use-by date (management number) on food that has been thawed or prepared or food contained in a package that has been opened.
- ☐ Periodically check the use-by dates to make sure that ingredients are not used or stored after these dates.
- ☐ Record the use-by dates where necessary.

Key Key points for shelf life point! Management

- Sort and organize.
- Practice first-in first-out.
- Affix or record expiry date.
- Conduct pre-use checks.
- Conduct periodic checks.

Note! Expiry and best-before dates and use-by dates (management numbers)

Expiry and best-before dates indicate the last date on which the food's quality is guaranteed if it is stored and sealed in accordance with the storage method specified by the manufacturer. Once the package has been opened or the food has been thawed or prepared, bacteria begin to multiply and oxidation progresses. As a result, many ingredients may deteriorate before their expiry or best-before dates.

A use-by date (management number) is determined after tests have been completed to determine how long an ingredient can be used for after its package has been opened or it has been thawed or prepared.

To provide customers with safe products, it is necessary for expiry dates, best-before dates, and use-by dates (management numbers) to be managed.

Product Quality Control Standards

(3)-4 Process management: Process management

Explanation

Even if safe ingredients are delivered, failure to carry out production appropriately may lead to a food poisoning incident.

Follow the control standards provided in the recipes or process charts throughout the entire process.

Control standards

1) Ingredient checks

- ☐ If allergen information has been made available to the public or the product is sold with a food label affixed, the purchasing of commercially available ingredients and the use of ingredients that are not specified in the recipe are prohibited.
- ☐ Where necessary, check and record the ingredients to be used.

Why? Reasons for prohibiting the use of commercially available ingredients and ingredients that are not specified in the recipe

A typical symptom of a food allergy is a rash. In some cases, however, an individual may develop whole-body symptoms referred to as "anaphylactic shock" and could even die in a very short period of time.

Even if they appear to be similar, ingredients that are supplied by different manufacturers, produced at different plants, or sold as different products contain different allergens.

If ingredients that are not specified in the recipe are used, the publicly available information will not be consistent with the allergens actually contained in the ingredients. This may result in a life-threatening event.

2) Appropriate thawing

- ☐ Thaw ingredients using an appropriate method.
- ☐ Follow the rules that have been implemented to prevent a temperature rise (e.g., rules requiring the use of a timer or temperature management).

3) Storage in an appropriate temperature range

- ☐ Store ingredients using an appropriate method (e.g., freeze, refrigerate, or heat).
- ☐ Create an efficient work procedure to avoid ingredients being left out or accumulated in one area.
 - * If ingredients are accumulated in one area, devise a way of preventing the food item temperature from rising by, for example, using a cooling tray or managing the room temperature.

4) Washing and disinfection of unprocessed ingredients to be eaten raw

- ☐ Unprocessed ingredients to be eaten raw must be washed and disinfected using an appropriate method.
 - Vegetables and fruits: Disinfect using chemicals or by heating
 - Seafood: Wash in fresh water
- □ To prevent unprocessed ingredients that have not yet been washed or disinfected from coming into contact with ingredients that have or other types of ingredients, separate the work areas, utensils, and times for the relevant ingredients as appropriate.
- After handling unprocessed ingredients, wash and disinfect the work area and also wash and disinfect or replace the utensils with a new set.
- ☐ After handling unprocessed ingredients, wash your hands and change your gloves.

Why? Reasons for washing and disinfecting unprocessed ingredients to be eaten raw

Many different types of bacteria exist in nature. Unprocessed ingredients (i.e., ingredients in the same state as when they were harvested) have a lot of bacteria on them. Eating unprocessed ingredients in their original state is highly likely to cause food poisoning. For this reason, it is necessary to wash them thoroughly, disinfect them, and then heat them.

5) Appropriate heating and cooling

- ☐ Heat ingredients using an appropriate method.
 - Follow the heating method, temperature, and time specified in the recipe or process chart.
- ☐ Check whether the ingredients have been appropriately heated all the way through by using one of the following methods.
 - Check the set temperature at the beginning and use a timer to set the appropriate cooking time.
 - Visually check how the center of the ingredient looks at the beginning.
 - Measure and record the temperature at the center of the ingredient at the beginning.
- ☐ Separate the work areas, utensils, and times for the relevant ingredients as appropriate before and after heating so that they will not come into contact with each other.



- □ Cool the ingredients as specified in the recipe or process chart.
- After handling the ingredients before heating, wash and disinfect the work area and also wash and disinfect or replace the utensils with a new set.
- After handling the ingredients before heating, wash your hands and change your gloves.
- ☐ Replace oil at an appropriate frequency.

Note! Degradation of oil (oxidation)

Oil gradually degrades (oxidizes) over time as it is heated or it becomes contaminated with impurities.

Consuming food prepared using degraded oil may cause symptoms such as heartburn, vomiting, and diarrhea and harm your health.

If the oil is a dark black color, gives off a greasy smell, produces fine bubbles that do not burst, and is viscous when it cools down, the oil has degraded. Set an appropriate frequency for the replacement of oil in accordance with the use conditions.

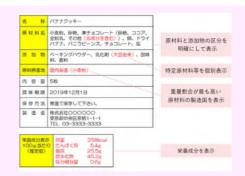
6) Product management for the processes up to product provision or shipment

- ☐ Carry out final product checks to confirm that the products have no quality problems, contain no foreign matter, and are packaged appropriately.
- ☐ If there is a set expiry time after production, clearly indicate that time.
 - * Guide: Within two hours from completion of production (Sanitary Management Manual for Large Cooking Facilities)
- ☐ Affix the correct food label on the packaged product appropriately.
- □ Follow the specified checks and recording procedure in order to prevent the wrong food label being affixed or incorrect information being indicated.
- ☐ After production, store the products using the specified method.
- ☐ After production, provide or ship the products within the specified time period.

Note! What is a food label?

When our food is packaged and sold somewhere other than the production site, we are legally required to affix a food label (as shown on the right) to the package.

Selling the product without the correct label or with a label that contains incorrect information not only violates the law but may also cause a health hazard, such as an allergic reaction.



Note! Food samples

The Sanitary Management Manual for Large Cooking Facilities stipulates that, when a large volume of products is produced in bulk, at least one product sample must be stored frozen for two weeks or longer for use in the event of a food accident that requires prompt identification of the cause.

*Guide: When providing 300+ servings of a menu item at once or 750+ servings in a day.

Product Quality Control Standards

(3)-5 Process management: Regular reset

Explanation

Bacteria can multiply on your hands and/or utensils as well as in your work area over time. It is also possible for viruses and bacteria that have been brought in from outside to spread without our knowledge.

To prevent the spread of contamination, we need to reset the work setup regularly.

Control standards

 Resetting the hygiene equipment and utens 	1)	Resetting the	hygiene	equipment	and	utensils
---	----	---------------	---------	-----------	-----	----------

Dusters

- ☐ Use different dusters in high-risk and low-risk areas.
- ☐ In a low-risk area, group dusters by purpose where necessary.
- □ Wash, disinfect, and replace dusters in accordance with the specified frequency.

Utensils

- Wash, disinfect, and replace utensils regularly to avoid bacteria growth being caused by continued use.
- ☐ Wash and disinfect utensils in accordance with the specified method at the end of each work day.
 - Disinfect them using chemicals or by heating, for example.

2) Washing hands, changing gloves, and carrying out sterilization during work

- ☐ Wash your hands or change your gloves when shifting from high-risk work to low-risk work, as indicated below.
 - When leaving a high-risk area and entering a low-risk area.
 - When shifting from high-risk work to low-risk work.
 - After touching a dirty item.
- ☐ Wash your hands and change your gloves regularly.

3) Resetting the work area

- Clean, wash, and disinfect your work area regularly.
- ☐ Disinfect all contact points (e.g., handles and water taps) regularly.

Why? **Cross-contamination and regular resets**

The transfer of viruses or bacteria from a contaminated item to a clean item (e.g., ingredients) via people, utensils, or places is called "cross-contamination." To avoid cross-contamination or prevent its spread, it is important that we reset the work setup regularly.

Note! Measures to prevent the inclusion of allergens

If a product is required to have a food label on its package, the inclusion of allergens that are not listed on that label violates the Food Labeling Act.

To avoid the unintentional inclusion of allergens, we need to carry out the three resets described above rigorously when positions or ingredients are switched.



Product Quality Control Standards

(3)-6 Process management: Delivery and sale

Explanation

Even if safe products are produced, inappropriate product management during their delivery or sale may result in them being contaminated with a virus or bacterium or allow bacteria to multiply. Until our products reach the customer, we must manage them carefully and not let our guard down.

Control standards

1) Product management during delivery

- ☐ When delivering products to a home or store, check the delivery temperature and time in advance and consider what packaging style is required (e.g., attachment of cooling packs or use of cool bags) to ensure that the products are maintained at the appropriate temperature during delivery.
- ☐ When using a parcel delivery service for frozen or refrigerated products, request the service provider to manage the temperature.
- □ Deliver products in the specified packaging style and under the set conditions.

2) Product management during sale

- ☐ Carry out acceptance inspections for products that have been delivered.
- ☐ Store products in an appropriate temperature range.
- ☐ Manage the temperature for product storage.
- ☐ When selling products that have a price card attached, make sure that the appropriate card is being used for the relevant products.
- ☐ When touching the products directly, use clean tongs or gloves.
- ☐ When selling the products, confirm that their expiry or best-before dates have not been reached.

3) Communication of accurate information

- ☐ If you receive a customer inquiry related to allergies, provide an answer in accordance with the rules.
 - If the allergen information is already publicly available:
 - Tell the customer where to find it or show them the allergen information.
 - Explain to the customer that there is a possibility of allergens having been inadvertently included.
 - If the allergen information has not been disclosed:
 - Tell the customer that the company does not manage allergens.
- ☐ If there is even the slightest ambiguity, avoid making a decision. Answer the customer after first checking with your manager or the company headquarters.

Why? Importance of communicating accurate information

When a customer with food allergies is choosing a product, they may ask a store employee for information as well as checking publicly available information and the food label affixed to the product package.

If the customer is given incorrect information, they may suffer an allergic reaction. In the worst-case scenario, a life-threatening situation may occur.

Therefore, we must respond to customer inquiries carefully.





Product Quality Control Standards

(4)-1 Area and utensil management: Management framework

Explanation

Maintaining a food facility in an appropriate condition is a prerequisite for hygiene control. Needless to say, legally binding facility standards must be met. At the same time, it is also necessary to ensure that a management framework has been properly put in place. This framework should cover matters such as waste management, water management, and pest control measures as well as cleaning plans, maintenance work, and inspections to keep the facility hygienic.

Control standards

1) Facility design

- □ Design the facility and install equipment in accordance with the facility standards required to obtain an operating permit.
- ☐ For systems that are connected to the outside (e.g., drains, air intake and exhaust systems, and ventilators), the facility must implement measures to prevent insects, rodents or other pests from entering and effluents and odors from being discharged outside.
- ☐ Implement measures to prohibit unauthorized individuals from entering the facility or accessing the water tanks.
- ☐ Designate work areas as high-risk or low-risk areas depending on the type of work carried out in the relevant areas.
- ☐ If the work involves moving from a high-risk area to a low-risk area, install equipment such as a sink for handwashing to prevent cross-contamination.
 - * Implement the necessary hygiene control rules in accordance with the area's hygiene level.
- ☐ Place the necessary work equipment along the paths passed through by workers and objects.

Note! Zoning

- High-risk area:
 An area in contact with the outside (e.g., loading area, dining hall, or shipping area).
 An area in which items returned from a high-risk area are handled.
- High-care zone and mediumrisk area:
 An area where items are stored or prepared.
- Low-risk area:
 An area where production takes place.

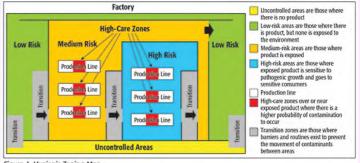


Figure 1. Hygienic Zoning Map

2) Facility management

Management of garbage areas and drainage systems

- □ Have garbage collected at an appropriate frequency.
- ☐ Clean the garbage areas, drainage systems, and grease traps and keep them hygienic.

Why? Consideration for the surrounding environment

Failure to clean garbage areas or drainage systems allows the propagation of pests (e.g., cockroaches and small flies) and may also attract rodents and birds. Furthermore, the company may be punished for violating effluent standards or cause discomfort to the local community due to bad odors.

To ensure good relations with the local community, give consideration to the surrounding environment!

Water management

- ☐ Carry out the legally required inspections if well water is used.
- ☐ If a water tank is used, clean it regularly (at least once a year) and keep cleaning records.
- ☐ Where necessary, carry out bacteria inspections, sensory inspections, and chloride level checks.

Pest control measures

- ☐ Enter into a contract with a pest exterminator to regularly monitor if and when pests appear.
- ☐ Check the work reports to determine when and where pests appear and what measures need to be taken to rectify the situation.
 - * Keep the work reports in a dedicated folder.
- ☐ If a problem occurs, implement the necessary improvement measures.
 - Tasks to be outsourced to specialists:
 - Removal of pests and cleaning and repair of places that we would be unable to handle ourselves.
 - Tasks to be handled in-house at the store or plant:
 Cleaning and repair of places that we can handle ourselves.

Key point!

Key points for keeping pests away

1. Share information with the pest exterminator on spotting a pest

Employees must report to their managers immediately if they spot a pest.

The manager must escalate this information to the pest exterminator.

* By obtaining accurate information and taking quick actions, deal with the situation before the situation worsens!

2. Prevention

- (1) Do not allow odors to develop: Clean the garbage areas, drainage systems, and grease traps.
- (2) Eliminate spaces where pests can hide: Declutter and organize areas near the entrance and prohibit the secondary use of cardboard.
- (3) Remove food that pests may consume: Do not leave the place unclean! Clean easy-to-miss places, such as areas under or behind an object or in the corners of a space.

Planning and implementation of cleaning

Ш	Create a cleaning schedule in ord	aer to keep	the work area	as and utensiis	ciean.

- ☐ Remove everyday dirt by conducting routine washing and cleaning to reset the work area.
- ☐ Reset areas that become increasingly dirty over time by regular washing and cleaning them.
- Using chemicals or heat, wash and disinfect utensils that come into contact with ingredients by using the specified method in accordance with the specified frequency.
- ☐ Sterilize areas with a high risk of virus or bacterium contamination, such as contact points and toilets, by using chemicals in accordance with the specified frequency and the specified method.
- ☐ Outsource the washing and cleaning of hard-to-access areas to a specialist.

Key point!

Preparing a cleaning manual

Prepare a cleaning manual for items that require a complicated cleaning method, items that result in different cleanliness levels depending on who cleaned them, and items that must be disinfected or sterilized in accordance with the set procedure.

Cleaning inspections and records

The manager checks whether cleaning has been carried out as scheduled, all dirt and stains have been removed, and disinfection and sterilization have been carried out in accordance with the correct procedure.
 For disinfection and sterilization work that needs to be recorded, confirm that no problems have been identified in terms of the chemical concentration, processing time, and procedure and then sign the record sheet.
 If any inadequacies are identified, make a record of them in the "Note" section of the hygiene management record sheet.
 Provide guidance in a timely manner if a problem is identified. At the same time, share information on the problem with employees at the morning meeting or via a communication notebook and implement activities to resolve the situation.

Planning, implementation, and recording of equipment maintenance and inspections

- Create a maintenance and inspection plan for the equipment used in the facility.
 - * Where necessary, calibrate equipment such as thermometers and scales.
- ☐ Carry out equipment maintenance and inspection as scheduled.
- ☐ Keep implementation records.

Product Quality Control Standards

(4)-2 Area and utensil management: 5S methodology

Explanation

The 5S methodology (Sort, Set in Order, Shine, Standardize, and Sustain) is a prerequisite for producing safe products.

This methodology also helps reduce losses, enhance work efficiency, prevent occupational injuries, and improve employee satisfaction. Therefore, it has been adopted in a wide variety of business fields. Practice these steps until they become a habit (sustain).

Control standards

1) Sort and Set in Order

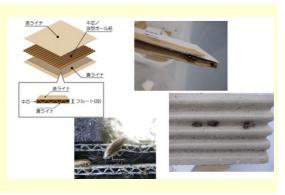
Sort: Remove all unnecessary items

- ☐ Unnecessary items must not be left lying around.
- ☐ Items prohibited at the production site must not be brought into the site.
- ☐ Cardboard must not be brought into the production site.
- ☐ Secondary use of cardboard (i.e., use for a different purpose) must be avoided.

Why? Why is the secondary use of cardboard prohibited?

It is prohibited because there is a high risk of cockroaches using the cardboard to build a nest. Cardboard has multiple layers, creating an ideal environment for cockroaches as they prefer small places so they cannot resist entering! Adhesives may become their food, too.

Therefore, cardboard provides cockroaches with both a hideaway and food.



Set in Order: Store items properly in designated areas

- ☐ The same items must always be stored in the same place.
- ☐ The following items must be placed in separate locations.
 - Personal belongings
 - Clean items, contaminated items, and hazardous items
 - Conforming items, defective items, and discarded items
 - Items in a low-risk area and a high-risk area

Key point!

Setting aside an area for personal belongings

Any lunch boxes and drinks that the employees bring in with them must be stored separately from the ingredients.

If drinks must be brought into the production site as a measure for preventing heat stroke, set aside a dedicated area and do not leave the drinks unattended inside the production site.

Note! What are clean items?

- 1. Ingredients consumed in their original state.
- 2. Utensils that touch ingredients.
- 3. Product containers and packaging materials.









Note! What are contaminated items? → Items contaminated with a large number of viruses or bacteria

1. Ingredients that an unspecified number of people have touched (ingredients that came from a third party).



2. Unprocessed ingredients that have not been washed or disinfected and ingredients that are cooked before consumption.



- 3. Items that are placed on the floor or at a low height.
- 4. Garbage cans and cleaning utensils.

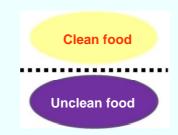


Key point!

Methods of separating ingredients

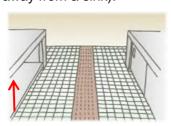
- Store them in different locations.
- · Store them at different heights.
- If ingredients are stored at the same height, prevent them from coming into contact with each other by, for example, putting them in containers with a lid.

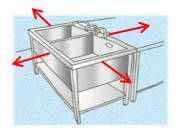






- ☐ Store clean items in hygienic locations.
 - In a low-risk area.
 - In a place where items will not come into contact with contaminants such as sewage water (e.g., a place situated at least 60 cm above a wet floor, 30 cm above a dry floor, or 30 cm away from a sink).





2) Cleaning

□ Carry out cleaning in accordance with the cleaning schedule.
 □ Carry out cleaning using an appropriate method.
 □ Ensure that there is no dirt that could cause ingredient contamination.
 □ Ensure that there is no accumulation of dirt that would allow pests to propagate.

3) Washing and disinfection

- ☐ Wash and disinfect items that come into contact with food.
- ☐ Wash and disinfect items at an appropriate timing.
- ☐ Wash and disinfect items by using an appropriate method.
- ☐ Ensure that all items are free of any remaining dirt that could allow bacteria to multiply.
- ☐ Ensure that the results of spot inspections to check washing and disinfection are within the scope of the standards.

Key point!

Disinfection methods

- Kill bacteria with chemicals.
 - Sodium hypochlorite
 - Alcohol, etc.
- Kill bacteria with heat.
 - Boiling
 - Washing machines

4) Repair and replacement

- ☐ Check for damage to locations and utensils that are used before and after work.
- ☐ If damage that could allow contamination by foreign matter is identified, repair or replace the damaged item.
- ☐ If damage that could allow the propagation of pests is identified, repair or replace the damaged item.
- ☐ If repair or replacement is not an option, implement risk reduction measures.