

Implementation Support Handbook for Food Fraud Prevention Edition 1.0

**Japan Food Safety Management Association
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BACKGROUND AND PURPOSE

In recent years, incidents of Food Fraud, such as the substitution or dilution of raw materials and mislabeling, have not only undermined consumer trust but, in some cases, also had serious implications for food safety, thereby threatening business continuity and brand value.

With the globalization of supply chains and the diversification of sourcing, the methods and points of occurrence of fraud have become increasingly complex and varied. As a result, businesses are required to establish cross-functional systems for the detection and prevention of such acts.

To address these risks, it is essential not only to establish management procedures, but also to foster a Food Safety Culture rooted in the organization's values, beliefs, and day-to-day behaviors. The Global Food Safety Initiative (GFSI) defines Food Safety Culture as follows:

Shared values, beliefs and norms that affect mindset and behavior toward food safety in, across and throughout an organization.

In organizations where Food Safety Culture is well embedded, employees are able to proactively identify and report signs of fraud and abnormalities, enabling risks to be mitigated at an early stage before they develop further.

This Handbook is a practical support tool designed in accordance with the requirements of JFS-C Version 3.2 FSM-8 (Food Fraud Prevention) so that everyone from top management to frontline personnel can implement, maintain, and improve effective Food Fraud prevention measures.

Its purpose is to embed within the organization a value system that places food safety above all else through strengthening procedures for vulnerability assessment, prioritization, the design and operation of mitigation measures, verification and recordkeeping methods, and communication both within and outside the organization.

1. REQUIREMENTS

JFS-C version 3.2 | FSM8 Food Fraud Prevention

Requirements

The organization shall document, implement, and record assessment procedures to identify potential and overt food fraud vulnerabilities such as tampering with records and labeling of products and intentional dilution, and prioritize food fraud mitigation measures.

Appropriate knowledge and expertise shall be utilized to develop and maintain an effective plan for this assessment.

The organization shall document, implement, verify and maintain a plan that specifies the measures the organization implements to mitigate the identified threats of food fraud.

This plan shall also be checked at intervals determined by the organization, or when new vulnerabilities are recognized, and reviewed, if necessary, as a result.

Concepts, specific examples

1. "Food fraud" refers to intentional acts committed primarily for economic reasons, such as tampering for the purpose of cost reduction or misrepresentation of good quality. Examples include dilution, substitution, concealment, fraudulent labeling, function enhancement by unauthorized means, counterfeiting, etc. Among these, this requirement covers food fraud as it relates to food safety.

Examples of food fraud related to food safety include the following:

- 1) Melamine contamination of powdered milk made in China in 2008
- 2) Horse meat contamination of beef-based food products sold in Ireland in 2013 (contamination of veterinary drugs)
2. Methods to "identify potential and actual falsification of records and labeling and intentional dilution of products" include the following:
 - 1) Refer to past or currently developing cases of food fraud in the supply chain. The organization will have a process in place for accessing cases of fraud. Such information can be obtained, for example, from
 - Industry Associations
 - Government Sources
 - Private information centers
 - Information systems established by the organization in the FSM2
 - 2) Identify in what situations food fraud can occur.

It is also effective to assume food fraud in each production flow as follows:

- (1) Fraud in raw materials used
- (2) Fraud during manufacture
- (3) Fraud in products after shipment (including resale of discarded defective products as food)
- 3) Evaluate the ease of occurrence (vulnerability).
3. Supply chains are becoming more complex, extending overseas, and the risk of food fraud is increasing. "Assessing vulnerability" means analyzing what types of food fraud are likely to

occur and how likely they are to occur due to external and internal factors in the context of such changes in the environment surrounding the organization. Vulnerability assessors need to understand the potential food fraud risks, which includes knowledge of the raw materials used in the field and the concept of vulnerability assessment described above. Vulnerability assessment is conducted from two perspectives: product/supplier. In light of the above, appropriate knowledge and expertise shall be utilized to develop and maintain an effective plan for this assessment. Examples of how this can be utilized include looking at other organizations' case studies posted on government recall sites, past case studies within the organization, receiving specialized external training, and obtaining the participation and advice of external food hygiene experts.

Examples of vulnerability assessment steps include:

- 1) Clarify the raw materials and their specifications related to the food products handled.
 - 2) Estimate what are the events that could cause fraud (what kind of fraud could occur).
 - 3) Estimate the magnitude of risk for any possible fraud that may occur.
 - 4) Estimate the magnitude of the impact of fraud on food safety.
 - 5) Prioritize vulnerabilities by risk and magnitude of impact.
4. Based on the results of the vulnerability assessment, a management plan to reduce food fraud shall be developed after conducting an evaluation of current control measures related to food fraud. The plan shall clearly identify priorities. The following methods can be used as means to reduce food fraud:
- 1) Conduct appropriate monitoring in response to vulnerabilities
 - 2) Verification of origin and labeling
 - 3) Specification Management
 - 4) Conduct supplier audits
 - 5) Analytical testing
 - 6) Use of anti-counterfeiting technology
 - 7) Collect whistleblower testimonials from within the organization.
5. Examples of methods include the following:
- 1) Add fraud to the scope when conducting second-party audits.
 - 2) Request that suppliers monitor their supply chains.
 - 3) Change the origin/supplier of raw materials to one where there is no precedent for fraud.
 - 4) Strengthen controls in situations where fraud practices are likely to occur (extremely low prices from suppliers used below market prices, soaring raw material prices, tight supply, frequent advance shipment times, sudden increases in order volumes, and understaffed production systems).
 - 5) Add fraud vulnerability to the frequency of analysis/testing.
 - 6) Review the supplier's financial situation.
6. Organizations are required to clarify the scope of the above food fraud prevention plan and incorporate and operate it into their food safety management system.
7. Food fraud vulnerability assessment shall be reviewed at intervals determined in advance by the organization, and/or whenever significant changes occur. Food fraud reduction plan will be revised/updated as needed. Food fraud vulnerability assessment shall be checked at

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intervals determined by the organization, and/or when a new threat is established, and reviewed, if necessary, as a result. Food fraud reduction plan shall be revised/updated as necessary and shall be implemented, verified, and maintained.

8. Please refer to the following for concepts on fraud prevention. (1) is the scope of application in Japan.)
 - 1) The "FCP's Focus on Collaboration," which was created by the Food Communication Project (FCP) launched by the Ministry of Agriculture, Forestry and Fisheries (MAFF) in the wake of the food fraud, is a good reference. This was created as an effort to curb the occurrence of food fraud. https://www.maff.go.jp/j/shokusan/fcp/whats_fcp/kyoudou.html
 - 2) U.S. Pharmacopeia (USP) "Food Fraud Mitigation Guidance" <https://www.usp.org/sites/default/files/usp/document/our-work/Foods/food-fraud-mitigation-guidance.pdf>

Explanation of Terms Used in This Handbook

Term	Description
Food Fraud	The intentional substitution, dilution, unauthorized addition, or falsification of labeling or records, etc., for economic gain or similar purposes, with primary focus on cases that may affect food safety. Reference: <i>GFSI Tackling Food Fraud Through Food Safety Management Systems</i>
Vulnerability	Weak points in locations or situations where fraud is likely to occur; areas in raw materials, processes, labeling, records, and supplier management where "loopholes" are more likely to arise. Reference: <i>SSAFE Food Fraud Vulnerability Assessment Tool</i>
Vulnerability Assessment (VACCP)	A procedure for estimating the risk of fraud in relation to products and suppliers, based on likelihood of occurrence × impact on food safety, and determining priorities. Documentation, implementation, and recordkeeping are essential.
Food Fraud Mitigation Plan	A plan that defines measures for deterrence, detection, correction, and prevention of recurrence, as well as responsibilities, frequency, and verification methods, based on the results of the vulnerability assessment. The plan must be documented, implemented, verified, and maintained. Reference: <i>GFSI Tackling Food Fraud Through Food Safety Management Systems</i>

2. IMPLEMENTATION STEPS

Food Fraud Prevention systems can be established in various ways depending on the scale of the business and the characteristics of the products handled.

This Handbook presents, as an example of implementation, a method for developing a Food Fraud Prevention system through the following eight steps.

- 2.1 Organizational Arrangements
- 2.2 Understanding the Current Situation
- 2.3 Information Gathering
- 2.4 Vulnerability Assessment
- 2.5 Development and Documentation of the Plan
- 2.6 Operation of the Plan
- 2.7 Review
- 2.8 Improvement

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2.1 Organizational Arrangements

Purpose: To clarify the chain of command and authority, and to establish a system in which personnel at the operational level can report and respond to suspicious events without hesitation.

Key considerations

Activity	Purpose / Key points
Appointment of responsible personnel	Appoint a Food Fraud Prevention Officer (e.g. the Plant Manager or the Quality Assurance Manager) and designate responsible personnel in each department as well.
Documentation of roles and authority	Document the decision-making criteria, reporting routes, and stop-work authority to be used when suspicious persons or suspicious items are identified. Clearly designate alternates for periods of absence, such as night shifts, holidays, or business trips.
Communication	Post the organizational structure and communication flow at the operational level so that it is immediately clear who should be informed and what information should be communicated.

Explanation:

- Effectiveness depends on the clarity of responsibilities and on employees' understanding and cooperation.
- The system should be built on Food Safety Culture and should place greater emphasis on trust and psychological safety than on surveillance.
- Examples of departments that should be involved include those with a high level of influence, such as Top Management, Finance, Purchasing, Supply Chain, R&D / Production (from the standpoint of product knowledge), and Quality Assurance (from the standpoint of methods and methodology).

2.2 Understanding the Current Situation

Purpose: To review existing arrangements from a Food Fraud Prevention perspective and clarify which measures are functioning effectively and where weaknesses remain.

Items to be checked

① Responsibility structure:

- Are the responsible person, alternate, organizational chart, and decision-making criteria functioning effectively?
- Is the chain of command during absences, such as at night, on holidays, or during business trips, also clearly defined?

② Supply chain management:

Do the controls for raw materials, packaging materials, labeling, and suppliers include the perspectives of deterrence, prevention, and early detection of fraud?

- Raw materials: Receiving documents, specifications, verification of origin, additional checks when market prices fluctuate
- Packaging materials and labels: Quantity control and disposal control, segregation of obsolete materials
- Product labeling: Approval procedures, print control, prevention of tampering

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- Suppliers: Contract clauses (including response requirements in the event of fraud), audits, and performance verification

③ Control of raw materials and packaging materials, and handling of product data:
Are testing and analytical results reliable, and are records protected against tampering and equipped with audit trails?

- Testing: Authenticity verification (e.g. DNA, specific gravity, etc.), consistency with labeling
- Records: Log control, input restrictions, revision history

④ Disposal and re-distribution control:
Are there systems and records to ensure that defective products, returned products, and obsolete materials are not reused or diverted?

⑤ Establishment of procedures for responding to abnormalities and misconduct:
Can reporting, isolation, investigation, and preservation of evidence be carried out effectively at the operational level when suspicious events are identified?

⑥ Internal reporting and culture:
Is an easy-to-use reporting system in operation, and is protection for whistleblowers well communicated? Is the principle of “when in doubt, stop” shared throughout the organization?

⑦ Implementation of training and exercises:
Are training plans and records in place at each level, including basic knowledge, practical job training, and practical exercises?

- Basic training: Training on the purpose, threats, and the importance of reporting
- Practical job training: Training on the company’s own procedures, roles, reporting routes, decision-making procedures, and recall
- Practical exercises: Activities to ensure effective retention and consistent execution of what has been taught in training

Criteria for assessment

- Functioning: The system and its operation are functioning consistently in line with the intended purpose.
- △ Partial: A system exists, but its effectiveness is weak and/or the linkage is insufficient.
- × Insufficient: Control, training, and operation are inadequate, and the system is not functioning effectively.

Explanation:

- Confirm whether existing measures are effectively contributing to Food Fraud Prevention on the basis of Food Safety Culture.
- By building on measures already in place, a Food Fraud Mitigation Plan can be established in a way that is suited to the organization’s actual circumstances.

Understanding the Current Situation (Example of Completed Form)

No.	Item to be checked	Example	Assessment	Remarks
①	Responsibility structure	The Quality Assurance Section Manager is clearly designated	○	Reviewed once a year

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		as the responsible person, and the Purchasing Section Manager as the alternate. The organizational chart is posted.		
②	Supply chain management	Receiving documents for raw materials are in order. Obsolete packaging materials are segregated. Supplier audit records are insufficient.	△	Planned to be added to the scope of the next audit
③	Testing, analysis, and record management	Test results are retained, but log control has not yet been introduced.	△	Considering an audit trail function for electronic records
④	Disposal and re-distribution control	Disposal slips for defective products are in place, and a rule prohibiting reuse has been established.	○	Considering retention of photographic evidence of disposal
⑤	Procedures for responding to abnormalities and misconduct	Reporting routes are clear, and an initial response manual is available. However, night-shift training has not yet been conducted.	△	Training for night-shift personnel will be added
⑥	Internal reporting system and culture	An anonymous reporting system is in place, but the number of reports is low. Communication to the operational level is insufficient.	△	Communication and case sharing will be strengthened
⑦	Implementation of training and exercises	Food Fraud items are not yet included in new employee training. Exercises are conducted every six months.	△	Training materials are scheduled for revision

2.3 Information Gathering

Purpose: To continuously collect signs of concern and external case information and reflect them in the assessment and countermeasures.

Examples of information to be collected

Type of information	Examples
Internal signs within the organization	<ul style="list-style-type: none"> - Complaints from inside and outside the organization - Sudden price fluctuations - Requests for correction of labeling - Audit findings related to internal and external threats - Internal audit records - Anonymous reports made to the organization, etc.
Information from industry peers and business partners	Fluctuations in raw material prices; Past cases of Food Fraud (e.g. substitution, dilution, false labeling or false claims, re-distribution, etc.)

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External knowledge	<p>Past incident cases; Public recall information; Warning notices issued by authorities; Topics discussed in industry groups, academic societies, and training sessions, etc.</p> <p>Examples of reference sources Ministry of Agriculture, Forestry and Fisheries (MAFF): Voluntary Reporting and Guidance Information https://www.maff.go.jp/j/syouan/kanshitoppage.html#sochi Consumer Affairs Agency (CAA): Recall Information Website https://www.recall.caa.go.jp/index.php Ministry of Health, Labour and Welfare (MHLW): Search System for Public Recall Cases https://ifas.mhlw.go.jp/faspub/IO_S020501.do? Action =a backAction</p>
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Explanation:

- Changes in economic conditions can easily trigger fraud, and should therefore be checked regularly.
- Even small inconsistencies, price movements, and frequent specification changes should be treated as warning signs.

2.4 Vulnerability Assessment

Purpose: To assess the vulnerabilities of the items identified through the review of the current situation and information gathering, and to clarify the priorities for countermeasures.

2.4.1 Identification of Scope

Scope of assessment: Products, raw materials, packaging materials, suppliers, contract manufacturers, disposal and re-distribution, records management, etc.

Examples of assessment scope

Scope	Examples
Raw materials	Minced beef, honey, seafood, vegetable oils, etc.
Packaging materials and labels	Product labels, outer carton printing, individual wrapping films, barcodes, etc.
Product labeling	Ingredient declarations, allergen labeling, best-before dates of final products, etc.
Suppliers	Overseas outsourced products, raw material suppliers, intermediaries, primary processors, etc.
Testing and analysis	Specific gravity testing for honey, product-specific analytical items, etc.
Disposal and re-distribution	Control of defective products, returned products, packaging materials, recalled products, etc.
Records management	Test data, purchasing records, lot control records, shipment records, etc.

2.4.2 Classification of Fraud Types

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Fraud types and examples of fraudulent conduct

Fraud type	Example structure of fraudulent conduct
Intentional addition of foreign or non-conforming substances (Adulteration)	The intentional addition of non-food substances or prohibited substances in order to reduce costs or increase the apparent volume or weight of a product. Examples include placing stones, sand, metal fragments, or wood chips at the bottom of bags or containers to increase weight, or excessively using colorants, flavorings, or sweeteners to make lower-quality raw materials appear to be premium-grade products. This may result in physical hazards such as choking, dental damage, or gastrointestinal injury, or chemical hazards such as unexpected poisoning or chronic toxicity risks.
Substitution / Replacement of raw materials	Replacing materials with cheaper or lower-quality ingredients that differ from the label in order to reduce material costs or market the product as a higher-value item. Examples include replacing part or all of a premium raw material with a similar but different raw material, or substituting an ingredient containing allergens. This may result in unexpected risks such as allergen exposure or residual chemical hazards, as well as health impacts caused by major differences in nutritional content or quality.
Dilution / Blending	Diluting products or raw materials with water or other inexpensive substances whose safety has not been fully confirmed, or blending materials of different quality, in order to increase profit. Examples include adding unsterilized water to liquid raw materials to increase volume, or blending materials of different grades and selling them as higher-grade products. This may result in microbial growth, quality deterioration, or health risks caused by changes in composition.
Mislabeling / Misrepresentation	Intentionally falsifying labeling information (such as ingredient names, country of origin, best-before/use-by dates, grade/classification, etc.) for economic purposes without ensuring safety or authenticity. Examples include tampering with best-before or use-by dates on expired products, falsifying country of origin, or misrepresenting a product as premium grade. This may result in consumers unknowingly ingesting expired products, products containing high levels of toxic residues, or undeclared allergens.
Counterfeiting / Document fraud	Forging or improperly using official documents or labels, such as certification marks, certificates, or test reports, in order to conceal the fact that a product is counterfeit or unauthorized. Products presented as genuine branded or certified products may in fact contain unapproved raw materials, untested products, or products that have not undergone quarantine. This may result in a wide range of risks, including unknown pathogens, residual chemicals, and foreign materials.
Theft / Diversion / Grey market distribution	Repackaging or relabeling products that should never reach the market, such as discarded, recalled, or stolen products, and selling

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	them. Examples include concealing and reselling temperature-abused products, expired products, or recalled lots. This may result in health risks caused by spoilage, mycotoxins, foreign material contamination, or inadequate allergen control.
Unapproved / Illegal production	Manufacturing in unapproved facilities or using prohibited pesticides, unapproved additives, or non-conforming raw materials in order to generate profit or avoid regulations. Because such products are distributed without appropriate hygiene control or testing, they may involve officially recognized threats or unknown hazards and may cause harm to health.

Example of organizing fraud types

Scope	Examples	Examples of fraud type
Raw materials	Minced beef, honey, seafood, vegetable oils, etc.	Substitution with other meat species; dilution or blending of honey = Substitution / Replacement, Dilution / Blending
Packaging materials and labels	Product labels, outer carton printing, individual wrapping films, barcodes, etc.	Reuse of obsolete labels; tampering with printing data = Mislabeling / Misrepresentation, Counterfeiting / Document fraud
Product labeling	Ingredient declarations, allergen labeling, best-before dates, etc.	False labeling; failure to reflect revisions = Mislabeling / Misrepresentation
Suppliers	Outsourced products, raw material suppliers, intermediaries, primary processors, etc.	Forged documentation; false reporting; use of unapproved raw materials = Counterfeiting / Document fraud, Unapproved / Illegal production
Testing and analysis	Specific gravity testing for honey, product-specific analytical items, etc.	Tampering with results; substitution of analytical data = Counterfeiting / Document fraud
Disposal and re-distribution	Control of defective products, returned products, packaging materials, recalled products, etc.	Resale of returned or defective products; diversion of packaging materials = Theft / Diversion / Grey market distribution
Records management	Test data, purchasing records, lot control records, shipment records, etc.	Data tampering; deletion of logs; inadequate approval history = Counterfeiting / Document fraud

2.4.3 Identification of Scenarios That Could Lead to Fraud

Assume possible fraud scenarios based on internal and external information sources.

Potential risks: Risks that may arise in the future due to changes in market conditions or supply conditions.

Example: Price increases, shortages of raw materials

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Identified risks: Risks for which concerns have already been recognized through past cases, regulatory observations, etc.

Reference sources:

- Public information from authorities and industry organizations
- Fraud cases at industry peers and business partners
- Internal history of quality and labeling issues
- Internal reports, audit findings, and complaint information

Examples of assumed scenarios

Scope	Examples	Examples of fraud type	Example fraud scenario (why fraud may occur)
Raw materials	Minced beef, etc.	Substitution with other meat species; dilution or blending of honey = Substitution / Replacement, Dilution / Blending	Because sharp increases in raw material prices or shortages create strong cost pressure, making it easier to prioritize profitability over safety and quality.
Packaging materials and labels	Product labels, etc.	Reuse of obsolete labels; tampering with printing data = Mislabeling / Misrepresentation, Counterfeiting / Document fraud	Because where a labeling revision is unfavorable (e.g. origin, date, etc.), there is a tendency to avoid reflecting the revision.
Product labeling	Ingredient declarations, etc.	False labeling; failure to reflect revisions = Mislabeling / Misrepresentation	Because correctly reflecting changes in formulation or raw materials may lead to complaints or reduced sales, making postponement or concealment a tempting option.
Suppliers	Outsourced products, etc.	Forged documentation; false reporting; use of unapproved raw materials = Counterfeiting / Document fraud, Unapproved / Illegal production	Because under severe price demands and delivery pressure, it may be assumed that if the paperwork looks correct, the actual situation will be difficult to detect.
Testing and analysis	Specific gravity testing, etc.	Tampering with results; substitution of analytical data = Counterfeiting / Document fraud	Because failing a product makes losses or problems visible, creating temptation for personnel to compromise or tamper “just a little.”
Disposal and re-distribution	Returned or defective products, etc.	Resale of returned or defective products; diversion of packaging materials	Because strong aversion to disposal costs and loss, together with weak disposal controls, can encourage improper distribution

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		= Theft / Diversion / Grey market distribution	based on a “too wasteful to discard” mindset.
Records management	Test data, etc.	Data tampering; deletion of logs; inadequate approval history = Counterfeiting / Document fraud	Because records are directly linked to accountability and evaluation, making rewriting or deletion an attractive means of concealing inconvenient facts.

2.4.4 Confirmation of Existing Control Measures

Identify existing control measures for the relevant items and confirm their effectiveness from the perspectives of fraud prevention, detection, and deterrence.

Examples of confirmation

Scope	Examples	Examples of fraud type	Example scenario that could lead to fraud	Confirmation of current control measures
Raw materials	Minced beef, etc.	Substitution with other meat species, etc.	Because sharp increases in raw material prices or shortages create strong cost pressure, making it easier to prioritize profitability over quality.	Receiving documents, specifications, origin verification, additional checks when market prices increase, authenticity checks (appearance / analysis)
Packaging materials and labels	Product labels, etc.	Reuse of obsolete labels, etc.	Because where a labeling revision is unfavorable (e.g. origin, date, etc.), there is a tendency to avoid reflecting the revision.	Quantity and disposal control, segregation of obsolete materials, management of artwork and revision history, measures to prevent tampering with printing
Product labeling	Ingredient declarations, etc.	False labeling, etc.	Because correctly reflecting changes in formulation or raw materials may lead to complaints or reduced sales, making postponement or concealment a tempting option.	Label approval procedures, revision and printing procedures, artwork control, tamper-prevention measures (locking, restricted authority)
Suppliers	Overseas outsourced products, etc.	Forged documentation, etc.	Because under severe price demands and delivery pressure, it may be assumed that	Contract clauses (actions in the event of fraud), audits and evaluation,

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			if the paperwork looks correct, the actual situation will be difficult to detect.	transaction history checks, authenticity checks of documents
Testing and analysis	Specific gravity testing, etc.	Tampering with results, etc.	Because failing a product makes losses or problems visible, creating temptation for personnel to compromise or tamper “just a little.”	Authenticity verification through various analyses, protection of test records against tampering (audit trails)
Disposal and re-distribution	Returned or defective products, etc.	Resale of returned or defective products, etc.	Because strong aversion to disposal costs and loss, together with weak disposal controls, can encourage improper distribution based on a “too wasteful to discard” mindset.	Disposal evidence (photographs and records), witnessed disposal, unopened-product control, measures to prevent re-distribution (controlled areas, locks)
Records management	Test data, etc.	Data tampering, etc.	Because records are directly linked to accountability and evaluation, making rewriting or deletion an attractive means of concealing inconvenient facts.	Tamper-prevention logs, electronic approval history, access rights management, backup management

2.4.5 EVALUATION OF LIKELIHOOD OF OCCURRENCE

THE EVALUATION SHOULD BE BASED ON LIKELIHOOD OF OCCURRENCE × IMPACT.

- Likelihood of occurrence (= how easily fraud can be successfully carried out)
- Impact (= the magnitude of the damage if it occurs)

① EVALUATION OF LIKELIHOOD OF OCCURRENCE

LIKELIHOOD OF OCCURRENCE SHOULD BE DETERMINED COMPREHENSIVELY BASED ON THE FOLLOWING FOUR TYPES OF VULNERABILITY:

- Economic vulnerability: Whether conditions such as price increases or supply shortages make it easier to engage in fraud
- Organizational vulnerability: Whether supplier management or auditing is weak and leaves loopholes
- Technical vulnerability: Whether fraud is difficult to detect through appearance checks or simple testing, making deception likely to succeed
- Ethical vulnerability: Whether the organization’s ability to deter misconduct is weak due to inadequate training, management attitude, weak reporting systems, etc.

GENERAL GUIDANCE FOR OVERALL EVALUATION:

- High: Many weaknesses exist, and fraud is likely to be successfully carried out.

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- Medium: Some deterrence is in place, but fraud may occur depending on the circumstances.
- Low: Management systems, culture, and technical controls are well established, and fraud is difficult to carry out successfully.

② EVALUATION OF IMPACT

IMPACT SHOULD BE ASSESSED BASED ON THE FOLLOWING THREE POINTS:

- Impact on food safety: Degree of health hazard and legal non-compliance
- Social impact: Loss of brand value and of customer and consumer trust, as well as media exposure
- Economic impact: Scale of recalls, response costs, production stoppage, and loss of sales

GENERAL GUIDANCE FOR OVERALL EVALUATION:

- High: May lead to serious health damage or a large-scale recall
- Medium: Cannot be ignored, but is not fatal
- Low: Limited to a minor quality issue

③ PRIORITY

PRIORITY SHOULD BE DETERMINED AS HIGH / MEDIUM / LOW BASED ON THE COMBINATION OF THE TWO AXES.

IMPACT	LIKELIHOOD OF OCCURRENCE: HIGH	LIKELIHOOD OF OCCURRENCE: MEDIUM	LIKELIHOOD OF OCCURRENCE: LOW
HIGH	PRIORITY: HIGH	PRIORITY: HIGH	PRIORITY: MEDIUM
MEDIUM	PRIORITY: HIGH	PRIORITY: MEDIUM	PRIORITY: LOW
LOW	PRIORITY: MEDIUM	PRIORITY: LOW	PRIORITY: LOW

EXAMPLE OF EVALUATION

SCOPE	EXAMPLE	EXAMPLE OF FRAUD TYPE	EXAMPLE SCENARIO THAT COULD LEAD TO FRAUD	CONFIRMATION OF CURRENT CONTROL MEASURES	LIKELIHOOD OF OCCURRENCE	IMPACT	PRIORITY
RAW MATERIALS	MINCED BEEF, ETC.	SUBSTITUTION WITH OTHER MEAT SPECIES, ETC.	INCREASE IN RAW MATERIAL PRICES, ETC.	RECEIVING DOCUMENTS AND SPECIFICATIONS / ORIGIN VERIFICATION / ADDITIONAL CHECKS WHEN MARKET PRICES FLUCTUATE / APPEARANCE AND ANALYTICAL CHECKS	HIGH	HIGH	HIGH
PACKAGING MATERIALS	PRODUCT LABELS, ETC.	REUSE OF OBSOLETE	UNFAVORABLE LABELING REVISION	QUANTITY AND DISPOSAL CONTROL / SEGREGATION OF OBSOLETE MATERIALS / MANAGEMENT OF ARTWORK	MEDIUM	MEDIUM	MEDIUM

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AND LABELS		LABELS, ETC.	NS, ETC.	AND REVISION HISTORY / CONTROL OF PRINTING DATA			
PRODUCT LABELING	INGREDIENT DECLARATIONS, ETC.	FALSE LABELING, ETC.	CHANGES IN FORMULATION OR RAW MATERIALS, ETC.	LABEL APPROVAL PROCEDURES / REVISION AND PRINTING PROCEDURES / ARTWORK CONTROL / AUTHORITY CONTROL	MEDIUM	HIGH	HIGH
SUPPLIERS	OVERSEAS SOURCED PRODUCTS, ETC.	FORGED DOCUMENTATION, ETC.	PRICE AND DELIVERY PRESSURE, ETC.	CONTRACT CLAUSES (RESPONSE IN THE EVENT OF FRAUD) / SUPPLIER AUDITS AND EVALUATION / TRANSACTION HISTORY VERIFICATION / DOCUMENT AUTHENTICITY CHECKS	HIGH	HIGH	HIGH
TESTING AND ANALYSIS	SPECIFIC GRAVITY TESTING, ETC.	TAMPERING WITH RESULTS, ETC.	AVOIDANCE OF NONCONFORMING RESULTS, ETC.	AUTHENTICITY CHECKS THROUGH ANALYSIS / RETENTION OF TEST RECORDS / AUDIT TRAIL ASSURANCE	MEDIUM	MEDIUM	MEDIUM
DISPOSAL AND RE-DISTRIBUTION	DEFECTIVE PRODUCTS, RETURNED PRODUCTS, ETC.	RESALE OF RETURNED DEFECTIVE PRODUCTS, ETC.	DISPOSAL COST BURDEN, ETC.	DISPOSAL RECORDS AND PHOTOGRAPHS / WITNESSED DISPOSAL / STORAGE IN CONTROLLED AREAS WITH LOCKS	MEDIUM	MEDIUM	MEDIUM
RECORDS MANAGEMENT	TEST DATA, ETC.	DATA TAMPERING, ETC.	AVOIDANCE OF ACCOUNTABILITY, ETC.	TAMPER-PREVENTION LOGS / ELECTRONIC APPROVAL HISTORY / ACCESS RIGHTS MANAGEMENT / BACKUP MANAGEMENT	MEDIUM	HIGH	HIGH

2.4.6 USE AND REVIEW OF RESULTS

- Develop measures starting with the vulnerabilities assessed as High priority.
- When new vulnerabilities arise, or when organizational or equipment changes occur, conduct reassessment promptly.

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- Record the evaluation results and retain them so that they can be referenced at the next review.

EXPLANATION:

- Whereas Food Defense focuses on malicious acts intended to cause damage, this section addresses misconduct driven by economic motives.
- The purpose is to make concerns visible, and the accuracy of the evaluation is improved when the evaluator has knowledge of raw materials, markets, and analytical methods.

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2.5 DEVELOPMENT AND DOCUMENTATION OF THE PLAN

PURPOSE: BASED ON THE RESULTS OF THE VULNERABILITY ASSESSMENT, TO ORGANIZE SPECIFIC CONTROL MEASURES AND OPERATIONAL METHODS FOR HIGH-PRIORITY ITEMS.

2.5.1 DEVELOPMENT

FOR HIGH-PRIORITY VULNERABILITIES, MAKE VISIBLE WHO WILL DO WHAT, WHEN, AND HOW TO PREVENT THEM.

BUILD AN EFFECTIVE INTERIM FRAMEWORK BASED ON CURRENT OPERATIONS WHILE PREPARING FOR FUTURE EXPANSION.

CONTENTS TO BE INCLUDED IN THE FOOD FRAUD MITIGATION PLAN

① PURPOSE AND SCOPE

- The purpose of the Plan is to reduce food safety risks arising from Food Fraud, such as intentional substitution, dilution, tampering, false labeling, document fraud, and improper distribution.
- The scope shall cover the entire manufacturing process, including raw materials, packaging materials, labeling control, suppliers, testing, disposal, and records management. *UNDER JFS-C, THE SCOPE IS DEFINED AS "FRAUD THAT POSES A FOOD SAFETY RISK."*

② RESPONSIBILITY STRUCTURE

Purpose: To clarify decision-making, reporting, and the chain of command so that personnel can act without hesitation.

Contents to be established:

Define responsible persons, alternates, contact networks, and decision-making authority.

Points to consider:

Are alternates designated for periods when the responsible person is absent, including business trips? Has this been communicated so that the operational level can respond immediately even when an alternate is acting?

③ ESTABLISHMENT OF MEASURES BASED ON THE VULNERABILITY ASSESSMENT

Purpose: To determine specific measures, starting with the highest-priority items, based on the results identified through the vulnerability assessment.

Contents to be established:

Review current control procedures and strengthen and improve them in stages, starting with the items assigned the highest priority in the vulnerability assessment.

Points to consider:

Make use of existing systems and consider realistic and effective measures.

HIGH-COST MEASURES SHOULD BE ORGANIZED AS "REFERENCE INFORMATION" REQUIRING MANAGEMENT DECISION AND CONSIDERED AT THE NEXT REVIEW. FIRST, PRACTICAL AND FEASIBLE MEASURES FOR THE RELEVANT VULNERABILITIES SHOULD BE EXAMINED.

EXAMPLES OF VULNERABILITY ASSESSMENT RESULTS AND ADDITIONAL MEASURES

SCOPE	PRIORITY	EXAMPLES OF ADDITIONAL MEASURES
RAW MATERIALS	HIGH	- CLASSIFY HIGH-RISK RAW MATERIALS (LIST KEY CONTROL RAW MATERIALS) - ESTABLISH A RULE FOR CONDUCTING ADDITIONAL CHECKS

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		<p>ONLY WHEN PRICES SURGE OR SUPPLY BECOMES UNSTABLE</p> <ul style="list-style-type: none"> - RECORD SPECIFICATIONS, ORIGIN, AND REASONS FOR CHANGE IN A SIMPLE NOTE WHEN SUPPLIERS ARE CHANGED
PACKAGING MATERIALS AND LABELS	MEDIUM	<ul style="list-style-type: none"> - CLEARLY INDICATE OBSOLETE OR DISCONTINUED MATERIALS AS “DO NOT USE” WITH COLORED TAPE, ETC. - KEEP ONLY THE LATEST APPROVED ARTWORK AT THE OPERATIONAL LEVEL, AND MOVE OBSOLETE VERSIONS TO A SEPARATE FOLDER - RETAIN OBSOLETE VERSIONS TOGETHER EACH TIME LABELING IS REVISED
PRODUCT LABELING	HIGH	<ul style="list-style-type: none"> - ADD A ONE-LINE CHECK TO THE RAW MATERIAL/FORMULATION CHANGE PROCEDURE: “HAS THE LABELING BEEN REVIEWED?” - AT LEAST TWO PERSONS, SUCH AS QUALITY AND PRODUCTION, SHOULD VERIFY LABELING REVISIONS - PERMIT USE ONLY OF THE LATEST LABELING ARTWORK, AND PHYSICALLY REMOVE OBSOLETE VERSIONS FROM THE OPERATIONAL AREA
SUPPLIERS	HIGH	<ul style="list-style-type: none"> - AT THE START OF A NEW BUSINESS RELATIONSHIP, CONFIRM AND RETAIN THREE ITEMS IN A SIMPLE SHEET: COMPANY PROFILE, MANUFACTURING SITE, AND SUPPORTING DOCUMENTS - ONCE A YEAR, CONFIRM THE STATUS OF KEY SUPPLIERS USING A SIMPLE QUESTIONNAIRE - IDENTIFY AT LEAST ONE ALTERNATIVE SUPPLIER AS FAR AS POSSIBLE
TESTING AND ANALYSIS	MEDIUM	<ul style="list-style-type: none"> - VALUES CLOSE TO SPECIFICATION LIMITS SHOULD BE CHECKED BY ANOTHER PERSON AGAINST THE RECORD AND THE ACTUAL RESULT - WHEN TEST RECORDS ARE CORRECTED, RETAIN THE DATE, NAME, AND A SIMPLE REASON - REVISE THE FORMAT AND OPERATION SO THAT “PASS/FAIL IS NOT DECIDED BY ONE PERSON ALONE”
DISPOSAL AND RE-DISTRIBUTION	MEDIUM	<ul style="list-style-type: none"> - MARK PRODUCTS FOR DISPOSAL CLEARLY WITH COLORED TAPE, ETC. - FIX THE STORAGE LOCATION FOR WASTE IN ONE PLACE WITHIN THE PLANT - AT THE TIME OF DISPOSAL, TAKE ONE PHOTOGRAPH ON THE SPOT AND KEEP IT WITH A SIMPLE RECORD TO DETER RE-DISTRIBUTION
RECORDS MANAGEMENT	HIGH	<ul style="list-style-type: none"> - FOR CORRECTIONS TO PAPER RECORDS, ENFORCE THE RULE OF USING A DOUBLE LINE, DATE, AND NAME WHEN CORRECTING ERRORS - ONCE A MONTH, THE RESPONSIBLE PERSON SHOULD REVIEW KEY RECORDS COLLECTIVELY, CHECKING ONLY THEIR EXISTENCE AND MAJOR INCONSISTENCIES - SEPARATE ELECTRONIC FILES INTO “EDITING” AND

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“RETENTION” FOLDERS, AND MAKE RETAINED FILES NON-EDITABLE IN PRINCIPLE

④ ESTABLISHMENT OF TRAINING AND EXERCISES

Purpose: To maintain a state in which all personnel can autonomously practice deterrence, early detection, reporting, and corrective action.

Contents to be established:

In basic training and job-specific training, define the target personnel, frequency, and methods, and design staged training according to roles.

Plan exercises assuming abnormality detection, reporting, initial response, and prevention of escalation, and reflect the results in improvement.

(Examples: recall exercises, response exercises when abnormalities are identified, etc.)

TRAINING FRAMEWORK (EXAMPLE)

TYPE	TARGET	TRAINING CONTENT / PURPOSE
BASIC TRAINING	ALL EMPLOYEES	PURPOSE, THREATS, AND THE IMPORTANCE OF REPORTING
JOB-SPECIFIC TRAINING	FRONTLINE PERSONNEL	COMPANY PROCEDURES, ROLES, REPORTING ROUTES, AND DECISION-MAKING PROCEDURES
	MANAGERS AND RESPONSIBLE PERSONNEL	RECEIPT OF REPORTS, INITIAL DECISION-MAKING, AND GUIDANCE ON RECURRENCE PREVENTION MEASURES
PRACTICAL EXERCISES	FRONTLINE PERSONNEL	EXERCISES BASED ON THE CONTENT OF JOB-SPECIFIC TRAINING

POINT: INTRODUCING ACTUAL INCIDENT CASES HELPS PERSONNEL VIEW THE ISSUE AS PERSONALLY RELEVANT AND INCREASES MOTIVATION TO LEARN.

* IN MOST CASES, ABNORMALITIES THAT MAY LEAD TO FOOD FRAUD ARE NOT CLEARLY RECOGNIZED AS FOOD FRAUD AT THE TIME OF DISCOVERY. THEREFORE, IN TRAINING, IT IS IMPORTANT TO ADDRESS ABNORMALITY RESPONSE NOT ONLY IN RELATION TO FOOD FRAUD, BUT ALSO IN CONNECTION WITH BROADER ABNORMALITY MANAGEMENT SUCH AS “FSM24 IDENTIFICATION OF NONCONFORMITIES AND CONTROL OF NONCONFORMING PRODUCT.”

REFERENCE LINK: SSAFE FOOD FRAUD VULNERABILITY ASSESSMENT TRAINING MODULE

[HTTPS://WWW.SSAFE-FOOD.ORG/TOOLS/FOOD-FRAUD-VULNERABILITY-ASSESSMENT-TRAINING-MODULES](https://www.ssafe-food.org/tools/food-fraud-vulnerability-assessment-training-modules)

⑤ IMPLEMENTATION, VERIFICATION, AND REVIEW

THE FOOD FRAUD MITIGATION PLAN SHALL BE MAINTAINED THROUGH THE FOLLOWING CYCLE:

Implementation → Verification → Review

CYCLE	CONTENTS
IMPLEMENTATION	CLEARLY DEFINE THE PERSONS RESPONSIBLE FOR EACH MEASURE AND THE FREQUENCY OF IMPLEMENTATION, AND EMBED THEM IN ROUTINE OPERATIONS.
VERIFICATION	CHECK REGULARLY WHETHER THE PLAN IS BEING IMPLEMENTED AS INTENDED AND WHETHER IT IS FUNCTIONING EFFECTIVELY. (EXAMPLES: MONTHLY CONFIRMATION BY THE RESPONSIBLE PERSON, INTERNAL AUDIT, SECOND-PARTY AUDIT, ETC.)

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REVIEW	<p>UPDATE THE ASSESSMENT AND THE PLAN WHEN ANY OF THE FOLLOWING OCCURS:</p> <ul style="list-style-type: none"> - MARKET CHANGES (PRICE SURGES, UNSTABLE SUPPLY) - NEW FRAUD CASES OR REGULATORY OBSERVATIONS - INTERNAL ABNORMALITY REPORTS, WHISTLEBLOWING, OR COMPLAINTS - RISK CHANGES DUE TO PROCESS OR SPECIFICATION CHANGES
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⑥ CONTROL OF DOCUMENTS AND RECORDS

ESTABLISH A POLICY FOR THE MANAGEMENT OF THE FOOD FRAUD MITIGATION PLAN AND RELATED DOCUMENTS.

2.5.2 DOCUMENTATION

PURPOSE: TO PREPARE THE ESTABLISHED FOOD FRAUD MITIGATION PLAN AS A DOCUMENT THAT CAN BE SHARED, IMPLEMENTED, AND MAINTAINED THROUGHOUT THE ORGANIZATION.

POINTS TO CONSIDER:

- The Plan should include the purpose, scope, responsibility structure, vulnerability assessment results, countermeasures, and review method.
- When revisions are made, approval, communication, and training should be carried out, and the reasons for revision should be recorded.
- The latest version should be maintained in a form that can be reliably checked at the operational level, whether in paper or electronic format.
- Consistency should be ensured with related procedures such as purchasing, quality, testing, and records management.

EXPLANATION:

- To deter internal threats, trust among employees and a culture in which concerns can be reported without hesitation are essential, and the results of exercises should always be reflected in the Plan.
- The Plan is not merely a document, but an organizational implementation plan, and should be operated as an integral part of daily operations.
- The structure should clearly show who is to do what and how in each department, so that no confusion arises at the operational level.
- Through regular review, training, exercises, audits, and related activities, the effectiveness of the Plan should be continually confirmed and improved.

2.6 OPERATION OF THE PLAN

PURPOSE: TO ENSURE THAT THE OPERATIONAL LEVEL CAN CONSISTENTLY CARRY OUT THE MEASURES THAT HAVE BEEN ESTABLISHED.

POINTS TO NOTE DURING OPERATION

POINT	CONTENT
(1) RESPONSIBILITY STRUCTURE	<ul style="list-style-type: none"> - MAINTAIN A CONDITION IN WHICH ALL PERSONNEL UNDERSTAND THE FLOW OF DECISION-MAKING AND REPORTING. - WHEN CHANGES OCCUR, SUCH AS SHIFT CHANGES OR PERSONNEL TRANSFERS, UPDATE THE ORGANIZATIONAL CHART AND COMMUNICATE IT PROMPTLY.
(2) BASIC OPERATING RULES	<ul style="list-style-type: none"> - IMPLEMENT COUNTERMEASURES IN ACCORDANCE WITH THE PLAN, ADJUSTING FREQUENCY AND METHODS AS NECESSARY. - RECORD IMPLEMENTATION RESULTS IN CHECKLISTS, LOGBOOKS, ETC.

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	<ul style="list-style-type: none"> - IF ABNORMALITIES IN ANALYTICAL VALUES, CHANGES IN PURCHASE PRICES, OR INCONSISTENCIES IN SUPPORTING DOCUMENTS ARE IDENTIFIED, REPORT AND CONFIRM THEM PROMPTLY. - REVISIONS AND SUPPLEMENTS SHALL BE REFLECTED IN THE PLAN AFTER APPROVAL.
(3) RECORDS AND CONTROL	<ul style="list-style-type: none"> - RETAIN TEST REPORTS, RECEIVING CHECKS, DISPOSAL RECORDS, ETC., AND MAINTAIN THEM IN A TRACEABLE CONDITION. - CONFIRM OMISSIONS AND DEFICIENCIES THROUGH PERIODIC CHECKS. - ORGANIZE RECORDS SO THAT THEY CAN ALSO BE PRESENTED DURING AUDITS AND EXTERNAL ASSESSMENTS.
(4) RESPONSE TO ABNORMALITIES	<ul style="list-style-type: none"> - MAINTAIN TRAINING AND EFFECTIVE PROCEDURES SO THAT THE PERSON WHO DISCOVERS THE ABNORMALITY CAN MOVE WITHOUT HESITATION FROM “REPORTING → ISOLATION → INVESTIGATION.” - GIVE POSITIVE FEEDBACK ON ABNORMALITY REPORTS AND WELCOME REPORTING. - IF THE INITIAL RESPONSE IS DELAYED, REVIEW THE SYSTEM RATHER THAN BLAMING INDIVIDUALS.
(5) TRAINING AND EXERCISES	<ul style="list-style-type: none"> - IN BASIC TRAINING, CLEARLY COMMUNICATE THE PURPOSE OF FOOD FRAUD PREVENTION AND SHARE WHY THESE MEASURES ARE NECESSARY. - IN EXERCISES, USE ASSUMED SCENARIOS TO ESTABLISH A STATE IN WHICH “DETECT → REPORT → ISOLATE” CAN BE CARRIED OUT NATURALLY IN ABNORMAL SITUATIONS. - RECORD THE RESULTS OF TRAINING AND EXERCISES AND REFLECT THEM IN THE NEXT CYCLE. - TRAINING SHOULD TAKE INTO ACCOUNT WHETHER THE CONTENT HAS BEEN EMBEDDED IN BEHAVIOR, REGARDLESS OF WHETHER THE TARGET IS A NEW OR EXPERIENCED EMPLOYEE.

EXPLANATION:

- At the operational stage, the Purpose is not merely to maintain the form, but to continue functioning effectively.
- Training and exercises should be implemented as two complementary components: training to deepen understanding, and exercises to embed behavior.
- Records and data should be used not merely as evidence, but as a foundation for deterrence, detection, and assurance of trust.
- In operation, continuity should be valued more than perfection; by embedding the measures in routine work, prevention can become part of the culture.

2.7 REVIEW

PURPOSE: TO VERIFY THE EFFECTIVENESS OF THE PLAN AND MAINTAIN A STATE IN WHICH THE ORGANIZATION CAN KEEP UP WITH CHANGES.

REGULAR REVIEW

- Confirm the degree of implementation, records, and effectiveness at defined intervals through internal audits, meetings, and similar activities.
- Collect operational difficulties and suggestions for improvement by listening to voices from the operational level.

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AD HOC REVIEW

- Conduct review promptly when new threats arise, when recalls, accidents, or incidents that have become social issues occur, or when changes in economic conditions, price volatility, or supply chain disruption arise.

EXPLANATION:

- By confirming both through regular and ad hoc review, the organization can respond to new threats and changes.
- Reflecting voices from the operational level is what transforms a desk-based Plan into an effective system.

2.8 IMPROVEMENT

PURPOSE: TO CARRY OUT IMPROVEMENTS BASED ON THE RESULTS OF OPERATION.

CLASSIFICATION	CONTENT
CORRECTIVE ACTION	WHEN FRAUD OCCURS WITHIN THE COMPANY OR AT A SUPPLIER, IDENTIFY THE CAUSE OF THE OCCURRENCE BASED ON REVIEW RESULTS AND IMPLEMENT MEASURES TO PREVENT RECURRENCE.
PREVENTIVE ACTION	TAKE MEASURES IN ADVANCE AGAINST POTENTIAL CAUSES.
REFLECTION OF NEW THREATS	INCORPORATE INCIDENT CASES, CASES FROM OTHER COMPANIES, SOCIAL CONDITIONS, AND NEW RISK INFORMATION INTO THE PLAN.
COMMUNICATION AND TRAINING	COMMUNICATE REVISED CONTENT TO ALL PERSONNEL AND, AS NECESSARY, REIMPLEMENT TRAINING AND EXERCISES SO THAT THE REVISIONS ARE EMBEDDED.

EXPLANATION:

- Improvement and updating are the mechanisms by which the Plan is kept aligned with current threats.
- Information published by authorities and industry organizations, as well as information from local industry networks, should be incorporated regularly and used in reviewing the Plan.

3. CASE STUDIES

Examples of Food Fraud Mitigation Plans

Type 1: Nationwide, Multi-Site, Integrated Food Manufacturer Model

- A multilayered management structure consisting of a head office oversight function and responsible persons at each plant.
- Operation based on standard documents established by the head office, supplemented by site-specific appendices reflecting the equipment and staffing conditions of each plant.
- Management of access, records, and audit trails in coordination with IT systems such as core business systems and manufacturing record systems.
- Integrated management of outsourced parties, such as contract manufacturers and external logistics providers, through contracts and audits.
- Horizontal deployment of the results of training, internal audits, and corrective action across the group.

Type 2: Mid-Sized to Upper Mid-Sized, Multi-Brand, Group Company Model

- A group structure consisting of affiliated companies, each operating one or several plants or centers.
- The head office Quality and Food Safety function develops and issues common standards, formats, and checklists, and audits the implementation status of each company and site.
- Control of packaging materials, labeling, labels, and similar items that are particularly vulnerable to fraud and tampering is treated as a priority control area.
- External personnel who have ongoing contact with the company, such as contractors, temporary agency workers, and long-term resident workers, are also managed under common rules.
- Through a combination of group standards and checklist-based operation, a consistent level of control is maintained even where plant size and staffing structures differ.

Type 3: Community-Based, Single-Plant Model (SMEs / Specialized Processors)

- A small-scale structure in which Quality, Production, General Affairs, and other functions are often handled concurrently.
- Rather than introducing expensive surveillance equipment, the system is built around measures that can be embedded into routine operations, such as key control, entry/exit records, segregation of packaging materials, and witnessed disposal.
- Concise procedures and clear communication are established so that initial response actions—such as reporting abnormalities, temporary isolation of products or materials, and preservation of evidence—can be carried out promptly.
- Psychological safety is ensured so that employees can report and seek advice without fear of disadvantage, thereby helping to deter internal threats.

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Food Fraud Mitigation Plan (Example)

Type 1: Nationwide, Multi-Site, Integrated Food Manufacturer Model

Issue Date: November 1, 2025

Version: 1.0

Prepared by: ○○ ○○ (Head Office Quality Assurance General Manager / Food Fraud Prevention Officer)

Approved by: △△ △△ (Senior Managing Director / Executive Responsible for Food Safety)

1. Purpose and Scope

1.1 Purpose

The purpose of this Plan is to reduce Food Fraud risks driven by economic motives—such as raw material substitution, dilution, false labeling, document fraud, and improper distribution—across the entire corporate group (including head office, all domestic and overseas plants, contract manufacturers, and external logistics sites), and to ensure the safety and trust of consumers and business partners.

1.2 Scope

The scope of this Plan shall cover the group’s business activities as a whole, including the following process steps, facilities, outsourced parties, and information.

Category	Description
Covered process steps	Procurement, receipt, storage, manufacturing, filling, packaging and labeling, shipment, disposal and re-distribution, and logistics of raw materials and packaging materials
Covered facilities	Head office, all domestic and overseas plants, packaging material warehouses, finished product warehouses, logistics centers, shared logistics hubs, and outsourced warehouses
Covered outsourced parties	Raw material and packaging material suppliers (domestic and overseas), contract manufacturers (OEM / private label manufacturers), external warehouses and logistics providers, and external testing and analytical laboratories
Covered information and records	Specifications, supporting documents (CoA, certificates of origin, etc.), test records, manufacturing records, purchasing and shipment records, label artwork data, and quality and traceability records in core business systems

2. Responsibility Structure

2.1 List of Responsible Persons

Category	Name	Department / Site	Role	Main responsibilities
Food Fraud Prevention Officer (Head Office)	○○ ○○	Head Office Quality Assurance Department	Company-wide oversight	Establish the Food Fraud Prevention policy; develop and approve group-wide rules; make final decisions and provide external explanations in the event of major incidents
Alternate (Head Office)	□□ □□	Head Office Quality Assurance Department	Acts in the absence of the	Make decisions and issue instructions in the absence of the

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			responsible person	responsible person; consolidate reports and incidents from each plant and company; support day-to-day operation
Plant Food Fraud Prevention Officer	Quality Assurance Manager at each plant	Each domestic and overseas plant	Plant oversight	Conduct plant-specific vulnerability assessments and develop countermeasures; confirm suspicious information; report to head office; provide employee training
Responsible persons in related departments	Responsible person in each department	Head Office Purchasing, Head Office Logistics, Production Planning, Information Systems, each plant (Production, Quality, Materials)	Operation within the department	Manage Food Fraud risks and routine checks in the assigned process; report abnormalities and suspicious information and implement initial response actions
Reporting contact point	Group compliance hotline representative	Head Office Compliance Department, Human Resources Department, etc.	Receipt of reports	Receive reports and consultations through the group-wide hotline and company-specific contact points; manage reporting records; communicate with related departments and follow up on actions
Secretariat	△△ △△	Head Office Quality Assurance Department	Oversight and support	Manage standard documents and company-wide data (reports, incidents, audit results, etc.); support preparation of appendices for each plant; plan training; operate the annual review

2.2 Reporting Flow

The basic reporting flow when an abnormality or suspicion potentially related to Food Fraud is identified shall be as follows:

Person who identifies the issue

→ Responsible person in the relevant department (Production, Quality, Purchasing, Logistics, etc.)

→ Plant Food Fraud Prevention Officer / Plant Manager

→ Head Office Food Fraud Prevention Officer / Head Office Quality Assurance Department

→ Senior Management / Corporate Communications and Legal (as necessary)

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If a suspected fraud case or a case that may lead to product recall or shipment suspension is identified, the plant shall immediately contact the Head Office Food Fraud Prevention Officer and Senior Management to discuss the response policy.

3. Vulnerability Assessment Results and Controlled Items

3.1 Assessment Method

The vulnerability assessment was conducted by a cross-functional team led by the Head Office Quality Assurance Department and including representatives from Purchasing, Production Planning, Information Systems, and each plant.

The assessment covered the following:

- Raw materials (spices, dried ingredients, additives, etc.)
- Packaging materials and labels (labels and outer cartons common to multiple product lines, etc.)
- Contract manufacturers (especially overseas OEM and private-label manufacturers)
- Records management (quality and testing data in core business systems, etc.)

The assessment axes were as follows:

- Likelihood of occurrence: High / Medium / Low
- Difficulty of detection: High / Medium / Low
- Impact: High / Medium / Low

Overall evaluation (High / Medium / Low) was determined based on vulnerability × impact. The detailed procedure is defined in the Vulnerability Assessment chapter of the *Food Fraud Prevention Handbook* and in the internal procedure *Food Fraud Vulnerability Assessment Procedure*, which all plants and group companies shall follow.

3.2 Summary of Assessment Results (Excerpt)

No.	Scope	Example	Anticipated fraud type	Likelihood of occurrence	Impact	Overall evaluation
1	Imported raw materials	Overseas spice blends	Dilution / blending, contamination with different raw materials, forged documentation	High	High	High
2	Packaging materials and labels	Labels and outer cartons common to multiple product lines	Use of obsolete versions, label tampering, misleading labeling	Medium	High	High
3	Contract manufacturing	Overseas OEM-manufactured products	Use of unapproved raw materials, use of materials differing from specifications, forged documentation	Medium	High	High

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4	Records management	Test data in core business systems	Data tampering, deletion, post-entry manipulation	Medium	High	High
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Detailed assessment results shall be retained separately in the Food Fraud Vulnerability Assessment Sheet (VA Sheet).

4. Control Policies (Countermeasures)

4.1 List of Control Policies

Item	Implementation policy (summary)	Responsible department	Supplementary notes (frequency, retention period, etc.)
① Control of raw materials and packaging materials	For high-risk imported raw materials, manage specifications, CoA, origin information, and market price information in an integrated manner. Conduct analysis by an external laboratory at least once a year, and share the results across all plants. When market prices rise sharply, head office shall issue an “additional verification instruction,” designate the relevant lots, and carry out additional verification.	Head Office Purchasing, Head Office Quality Assurance, Quality Assurance at each plant	Analytical results shall be reviewed at the annual Group Quality and Food Safety Meeting.
② Product labeling and label control	Manage the label artwork master centrally at head office, and have sites verify the latest approved version using barcodes / QR codes. Obsolete materials shall be marked as “Do Not Use” in the system and segregated in a dedicated warehouse area.	Head Office Quality Assurance, Quality Assurance at each plant	When labeling is revised, both system updates and shelf arrangement shall always be carried out, and internal audits shall reconcile the master, the physical items, and the records.
③ Supplier and contractor control	Head office shall prepare and update fraud risk profiles by country and raw material. For high-risk suppliers and contractors, audits or sample testing shall be conducted at least once a year. Contracts shall clearly state fraud prohibition clauses, obligations to provide information, and cooperation with corrective action requests.	Head Office Quality Assurance, each plant	Risk profiles shall be updated and shared at the start of new business relationships and during regular re-evaluation.
④ Testing, analysis, and result management	For testing of high-risk items, dual verification of results and electronic audit trails shall be mandatory. In the core business system, the edit-history function shall be enabled, and the	Information Systems Department, Quality Assurance at each plant	Monthly log and audit reports shall be consolidated by the Head Office Quality Assurance Department and checked for abnormalities.

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	presence of logs shall be checked once a month.		
⑤ Disposal and re-distribution control	Clearly identify products for disposal, recalled products, and obsolete materials (e.g. by labels and color tape), and prevent re-distribution through witnessed disposal and photographic evidence. High-risk items shall be stored in locked areas.	Production and Quality Assurance at each plant	Disposal and recall records and photographs shall be retained for the number of years specified in group standards.
⑥ Records and information system control	Standardize company-wide rules for correction of important records (who corrected, when, and why), and conduct periodic review of access rights and backups.	Head Office Quality Assurance	Annual review of logs and access rights shall be conducted, and the results shall be reported to Senior Management.
⑦ Internal reporting and culture building	Operate a group-wide hotline and clearly indicate whistleblower protection. Repeatedly communicate through training and internal newsletters that reporting suspected fraud is welcomed.	Compliance Department, Human Resources Department, Head Office Quality Assurance	The number of reports / consultations and the status of response shall be shared during the annual review, without identifying individuals.

5. Training and Exercises

Type	Target	Training content / Purpose	Frequency (guideline)	Responsible party
Basic Training	All group employees, part-time workers, temporary agency workers, etc.	Purpose of Food Fraud, typical fraud methods, effects on health, social trust, and legal compliance, importance of reporting, guidance on reporting channels	Once a year / at the time of hiring	Quality Assurance Department and Human Resources Department at each plant
Job-Specific Training (Purchasing / Quality / Production)	Personnel in Purchasing, Quality, Production, and Logistics	Company procedures, roles, reporting routes, key points for raw materials, labeling, disposal, and records management, and initial response when fraud is suspected	At least once a year	Head Office Quality Assurance Department and each plant
Management Training	Plant Managers, Department Heads, Head Office Managers	Receipt of reports and initial decision-making, determination and follow-up of corrective and preventive actions,	Once a year	Head Office Quality Assurance Department and Compliance Department

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		horizontal deployment within the group		
Practical Exercises	Related departments such as Purchasing, Quality, Production, and Logistics	Scenario-based exercises covering “detection → reporting → isolation → investigation” (e.g. raw material substitution, failure to reflect label revisions, re-distribution of discarded products, etc.)	At least once a year	Planned company-wide by the Head Office Quality Assurance Department and implemented at each plant

The date, content, and participants of training and exercises shall be recorded by each plant and head office and retained so that they can be confirmed during internal audits and external assessments.

6. Implementation, Verification, and Review

6.1 Implementation (Operation)

Each plant and group company shall translate the policies of this Plan into its own appendices (e.g. list of high-risk items, specific checking methods, etc.) and procedures, and clearly define who will do what, how often, and in what format, integrating them into routine operations.

If sudden changes in purchase prices, changes in specifications, abnormal analytical values, unusual supporting documents, or inconsistencies in disposal or records are identified, the operational-level person responsible shall promptly report them through the plant responsible person to the Head Office Quality Assurance Department.

6.2 Verification

At head office level, the implementation status and effectiveness of this Plan shall be verified by the following methods:

- Monthly or quarterly reviews by the responsible person
- Group internal audits (annual rotation of sites)
- Annual sharing of status and review at the Group Quality and Food Safety Meeting

The main verification points shall be as follows:

- Whether measures are being implemented as planned (frequency, records, logs, etc.)
- The number and trends of near misses, inconsistencies, complaints, and reports related to fraud
- Whether there is any gap between the vulnerability assessment results and the events that have actually occurred

6.3 Review

The vulnerability assessment and this Plan shall be reviewed in the following cases:

- Annual periodic review (conducted at the Group Quality and Food Safety Meeting)
- When there are major changes in market conditions or the supply chain, such as raw material prices or supply status
- When new fraud cases, regulatory observations, or industry information become known
- When concerns become apparent through internal abnormality reports, whistleblowing, complaints, etc.

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The results of the review shall be horizontally deployed to all sites through document revision and training.

7. Document and Record Control

7.1 Document Control

- This Plan shall be positioned as the Head Office Group Standard, and the revision date, revised content, reason for revision, and approver shall be clearly recorded.
- The relationship between the head office standard and plant-specific appendices (e.g. list of high-risk items, list of substitute controls, etc.) shall be clearly defined in the document control system, with links established.
- The latest version shall be accessible to the Head Office Quality Assurance Department and all plants, and obsolete versions shall be clearly distinguished and retained to prevent misuse.

7.2 Main Related Records

- Receipt documents, specifications, and authenticity verification records for raw materials and packaging materials
- Label approval records, artwork data, and revision histories
- Contracts, audits, evaluation records, and risk profiles for suppliers / contractors
- Testing and analytical records, correction histories, and system audit trails
- Disposal and re-distribution control records (disposal lists, witnessing records, photographs, etc.)
- Monthly log audit reports and access rights review records
- Internal reports and consultation records, with anonymity protected as necessary
- Internal audit records and minutes of the Group Quality and Food Safety Meeting

7.3 Retention Periods (Guideline)

- Records relating to high-risk matters (high-risk raw materials, major incident-related matters, etc.): 5 years
- Other related records: 3 years

Retention periods shall be reviewed as necessary based on legal requirements, customer requirements, and internal regulations.

8. Appendices and Reference Information

- Appendix 1: Food Fraud Vulnerability Assessment Sheet (VA Sheet)
- Appendix 2: Food Fraud Mitigation Plan Checklist (Head Office version / Plant version)
- Appendix 3: Training and Exercise Plan / Record Format
- Appendix 4: Plant-Specific Appendices (list of high-risk items, list of substitute controls, etc.)

Reference information (for future consideration):

DNA and isotope analysis, enhancement of electronic record systems (strengthening of audit trails), serialization of labels and seals, regular use of external databases (USP, RASFF, etc.), etc.

End of Example Food Fraud Mitigation Plan: Type 1 – Nationwide, Multi-Site, Integrated Food Manufacturer Model

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Food Fraud Mitigation Plan (Example)

Type 2: Mid-Sized to Upper Mid-Sized, Multi-Brand, Group Company Model

Issue Date: November 1, 2025

Version: 1.0

Prepared by: ○○○○ (Group Head Office, General Manager of Quality and Food Safety / Food Fraud Prevention Officer)

Approved by: △△△△ (Director / Executive Responsible for Food Safety)

1. Purpose and Scope

1.1 Purpose

The purpose of this Plan is to reduce Food Fraud risks driven by economic motives, such as raw material substitution, dilution, false labeling, document fraud, and improper distribution, within a mid-sized to upper mid-sized group of companies with multiple brands and multiple sites, and to ensure the safety and trust of consumers and business partners.

This Plan is positioned as a common basic policy for the group and serves as the basis on which each operating company will develop specific measures suited to its own circumstances.

1.2 Scope

The scope of this Plan covers the following activities at the group head office and at the plants and sites of each operating company.

- Covered process steps: Procurement, receipt, storage, manufacturing, packaging and labeling, shipment, disposal and re-distribution of raw materials and packaging materials, and management of paper and electronic records
- Covered facilities: Plants of each operating company, packaging material warehouses and finished product warehouses, shared or external logistics sites, and the group head office
- Covered external parties: Raw material and packaging material suppliers, contract manufacturers (OEM / private-brand manufacturers), external warehouses and logistics providers, staffing agencies, and contractors performing on-site work
- Covered information and records: Receipt and shipment records, purchasing and order records, label text and artwork data, specifications and supporting documents (e.g. CoA), disposal and re-distribution records, and records in Excel files, paper forms, and core business systems

Each company and each site shall use the Group Common Checklist based on this Plan to define its own vulnerability assessment and specific countermeasures.

2. Responsibility Structure

2.1 List of Responsible Persons

Category	Name	Department / Site	Role	Main responsibilities
Food Fraud Prevention Officer (Group Head Office)	○○○○	Group Head Office, Head of Quality and Food Safety	Group-wide oversight	Determine the group-wide Food Fraud Prevention policy, approve standard documents, make final decisions in major incidents, and report to Senior Management

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Alternate (Group Head Office)	□□□□	Group Head Office, Quality and Food Safety Representative	Acts in the absence of the responsible person	Make decisions and issue instructions in the absence of the responsible person, consolidate reports from each company, and support day-to-day operation
Food Fraud Prevention Officer of each company	Quality Assurance Manager of each company	Quality Assurance Department of each operating company	Company-wide oversight	Implement and update vulnerability assessments and countermeasures within the company, operate in accordance with head office policy, and report incidents and performance
Responsible persons in related departments	Department Managers of each company	Purchasing, Quality Assurance, Production, Logistics, Human Resources / General Affairs of each company	Operation within the department	Manage risks and conduct routine checks in the assigned processes, and promptly report abnormalities or suspicious information and carry out initial response
Reporting contact point	Compliance representative, etc.	Group common reporting contact point / internal reporting contact point of each company	Receipt and consolidation of reports	Receive and record reports and consultations, consolidate and analyze reported content, communicate with related departments, and follow up on actions

2.2 Reporting Flow

The basic reporting flow when an abnormality or suspicious event potentially related to Food Fraud is identified within the group shall be as follows:

Person who identifies the issue

→ Frontline Supervisor / Team Leader

→ Responsible person in the relevant department of each company (Quality, Purchasing, Production, Logistics, etc.)

→ Food Fraud Prevention Officer of each company / President of the operating company

→ Food Fraud Prevention Officer at Group Head Office

→ Senior Management / Corporate Communications and Legal (as necessary)

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When suspected intentional fraud or a case that may lead to recall or shipment suspension is identified, the Food Fraud Prevention Officer of the operating company shall immediately notify the Food Fraud Prevention Officer at Group Head Office and Senior Management.

3. Vulnerability Assessment Results and Controlled Items

3.1 Assessment Method

The Group Head Office Quality and Food Safety Department took the lead in consolidating information from Quality Assurance, Purchasing, Production, and Human Resources / General Affairs representatives of each company, and conducted vulnerability assessments for the following items:

- Raw materials
- Packaging materials and labels
- Product labeling
- External personnel (temporary agency workers, long-term resident workers, etc.)
- Records management (paper records, Excel files, simple systems, etc.)

The assessment axes are as follows:

- Likelihood of occurrence: High / Medium / Low
- Difficulty of detection: High / Medium / Low
- Impact: High / Medium / Low

Overall evaluation (High / Medium / Low) was determined using the risk matrix.

The detailed assessment procedure shall follow the Vulnerability Assessment chapter of the Food Fraud Prevention Handbook and the Group Common Vulnerability Assessment Sheet.

3.2 Extract of Assessment Results

No.	Scope	Example	Anticipated fraud type	Likelihood of Occurrence	Impact	Overall Evaluation
1	Packaging materials and labels	Multi-brand common labels and outer cartons	Use of obsolete versions, label tampering, misleading labeling	Medium	High	High
2	Product labeling	Label text for private-brand and national-brand products	False labeling, failure to reflect revisions	High	High	High
3	External personnel management	Temporary agency workers and long-term resident workers	Removal of waste products, tampering with records	Medium	Medium	Medium
4	Records management	Receipt and shipment records (paper / Excel)	Transcription errors, intentional rewriting	Medium	Medium	Medium

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Details shall be recorded in the Food Fraud Vulnerability Assessment Sheet and retained together with this Plan.

4. Control Policies

4.1 List of Control Policies

Item	Implementation policy (summary)	Responsible department	Supplementary notes
① Packaging material and label control	Use the Group Common Packaging Material and Label Checklist, and always carry out segregation and inventory confirmation of obsolete materials when labels are revised. Obsolete labels shall be marked with a "Do Not Use" label, consolidated on a dedicated shelf at each company, and removed from the operational area.	Quality Assurance and Production of each company	Each labeling revision shall be recorded on the checklist, and group internal audits shall verify shelves, artwork, and records on a sample basis.
② Product labeling control	Approval forms for changes in raw materials, formulations, or suppliers shall include a column for "impact on labeling confirmed," and dual approval by Quality Assurance and Product Development (or Sales) shall be mandatory.	Quality Assurance and Product Development of each company	This shall be operated every time raw materials or formulations are changed, and approval forms shall be checked on a sample basis once a year.
③ External personnel management	Temporary agency workers and on-site contractors shall receive annual mini-training on the prohibition of fraud and tampering and on access rules for waste areas, and their written pledges shall be renewed. Waste areas shall in principle be accompanied by company employees.	General Affairs / Human Resources and frontline supervisors of each company	Training shall be conducted upon initial acceptance and once a year thereafter, and training records and pledges shall be checked in internal audits.
④ Records management (paper / Excel)	Document and standardize across the group common rules for correcting records (correction with a double line, date, initials, and reason). Once a month, responsible persons shall review key records on a sample basis for unusual corrections and missing entries.	Quality Assurance Manager of each company	Operation shall be ongoing, and the monthly review results shall be recorded briefly and reviewed during internal audits.

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⑤ Internal reporting and culture	Publicize the group common reporting contact point and each company's contact point, and make clear in work rules and training that employees may consult or report whenever in doubt and that reporters will not suffer disadvantage.	Group Head Office Compliance Department and Human Resources of each company	Numbers of reports / consultations and response status shall be shared once a year at the group meeting and analyzed as trends without identifying individuals.
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5. Training and Exercises

Type	Target	Training content / Purpose	Frequency (guideline)	Responsible party
Basic Training	All employees, part-time workers, temporary agency workers, etc. at each company	Purpose of Food Fraud, typical methods, impact, importance of reporting, guidance on reporting contact points	Once a year / upon hiring or assignment	Quality Assurance Department and Human Resources Department of each company
Job-Specific Training	Personnel in Purchasing, Quality, Production, Logistics, and Waste Handling	Company procedures, roles, reporting routes, key points in label revision, disposal, and records management, response when fraud is suspected	At least once a year	Quality Assurance and related departments of each company
Management Training	Plant Managers, Department Heads, Head Office and operating company managers	Receipt of reports and initial decision-making, determination and follow-up of recurrence prevention measures, horizontal deployment within the group	Once a year	Group Head Office Quality and Food Safety Department and Compliance Department
Practical Exercises	Related departments such as Purchasing, Quality, and Production	Scenario-based exercises covering "detect → report → isolate → investigate" (e.g. failure to reflect label revisions, mixing of obsolete labels, removal of waste products, etc.)	At least once a year	Implemented mainly by Quality Assurance of each company, with support from head office as necessary

Records of training implementation (date, content, participants) shall be retained by the Quality Assurance Department of each company and checked during internal audits.

6. Implementation, Verification, and Review

6.1 Implementation

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Each company shall translate the policies of this Plan into its own checklists and procedures, operate them at the frequencies indicated in the table, and keep concise records.

When sharp changes in purchase prices, specification changes, abnormal analytical values, unusual supporting documents, or inconsistencies in disposal or records are identified, information shall be shared with the group head office through the Food Fraud Prevention Officer of each company.

6.2 Verification

At group level, implementation status and effectiveness shall be verified by the following methods:

- Group internal audits (covering each company on a rotating basis)
- Review of implementation status and case examples at the annual Group Quality and Food Safety Meeting

The main verification items shall be:

- Whether the countermeasures are being implemented as planned (frequency, records, training, pledges, etc.)
- Number and details of near misses, inconsistencies, complaints, and reports related to fraud
- Whether there is any gap between the vulnerability assessment results and actual events

6.3 Review

The vulnerability assessment and this Plan shall be reviewed in the following cases:

- When the annual Group Quality and Food Safety Meeting determines, based on review results, that revision is necessary
- When there are major changes in market conditions or the supply chain (e.g. sharp price increases, supply instability, etc.)
- When new fraud cases, regulatory observations, or industry information are published
- When concerns become apparent through reports, complaints, etc. within the group

Review results shall be reflected in revisions to the Group Common Checklist and the procedures of each company, and shall be horizontally deployed throughout the group.

7. Document and Record Control

7.1 Document Control

- This Plan shall be version-controlled as the Group Standard, and the revision date, revised content, reason for revision, and approver shall be recorded.
- Each company shall prepare its own supplementary procedures (such as checklists) based on this Plan and maintain consistency of content.
- The latest version shall be accessible to the Quality Assurance Department of each company and major sites, and shall be controlled so that obsolete versions are not used incorrectly.
- Consistency with related group standards (purchasing, packaging materials and labeling control, waste management, records management, etc.) shall be checked at the time of revision.

7.2 Main Related Records

- Inventory records for packaging materials and labels, and obsolete-version segregation records
- Label approval records, approval forms, and revision histories
- Training records and written pledges for external personnel
- Receipt and shipment records, and record correction histories
- Internal audit records and summary minutes of the Group Quality and Food Safety Meeting

- Reporting and consultation records, with anonymity protected as necessary

7.3 Retention Period

- Records directly related to fraud risk (labeling, disposal, reporting, audits, etc.): 3 to 5 years (to be defined in the group standard)
- Other related records: 3 years

Retention periods shall be reviewed as necessary in light of legal requirements, internal rules, and business partner requirements.

8. Appendices and Reference Information

- Appendix 1: Food Fraud Vulnerability Assessment Sheet (VA Sheet / Group Common Format)
- Appendix 2: Food Fraud Mitigation Plan Checklist (for each company)
- Appendix 3: Training and Exercise Plan / Record Format

Reference information (optional):

- List of URLs for external information sources such as authorities, industry organizations, and academic societies
- Items for future consideration (e.g. systemization of label control, digitization of waste management, strengthened information sharing with staffing agencies, etc.)

End of Example Food Fraud Mitigation Plan: Type 2 – Mid-Sized to Upper Mid-Sized, Multi-Brand, Group Company Model

Implementation Support Handbook for Food Fraud Prevention

Food Fraud Mitigation Plan (Example)

Type 3: Community-Based, Single-Plant Model (SMEs / Specialized Processors)

Issue Date: November 4, 2025

Version: 1.0

Prepared by: ○○○○ (Plant Manager / Food Fraud Prevention Officer)

Approved by: △△△△ (President)

1. Purpose and Scope

1.1 Purpose

The purpose of this Plan is to reduce Food Fraud risks driven by economic motives at the Company's ○○ Plant, such as substitution of raw materials, falsification of origin or grade, false labeling, and improper re-distribution of defective or discarded products, and to ensure the safety and trust of local consumers and business partners.

At the same time, this Plan serves to give concrete effect to the Company's Food Safety Policy and Compliance Policy.

1.2 Scope

The scope of this Plan covers the following process steps and related activities at the Company's ○○ Plant:

- Receipt and storage of raw materials and packaging materials
- Manufacturing processes such as raw material pre-treatment, blending, heating, and cooling
- Packaging, labeling, and storage of final products
- Shipment and delivery using local transport providers
- Storage of defective and returned products, and control of disposal and re-distribution
- Records management using paper records and simple Excel files, such as purchasing notes, shipment notes, and test records

If any activities are excluded from the scope, the reasons shall be recorded separately.

2. Responsibility Structure

2.1 List of Responsible Persons

Category	Name	Department / Site	Role	Main responsibilities
Food Fraud Prevention Officer	○○○○	○○ Plant, Plant Manager (also serving as Quality Control Manager)	Overall plant oversight	Bears final responsibility for Food Fraud Prevention at the plant; determines policies and rules, confirms operating status, makes decisions in major incidents, and provides external explanations
Alternate	□□□□	Production Department, Production Leader	Acts in the absence of the responsible person	Makes decisions and gives instructions in the absence of the responsible person, and consolidates abnormal or suspicious information at the operational level
Related person (Purchasing)	◎◎◎◎ ◎	Administration Department,	Day-to-day operation (Purchasing)	Communicates with suppliers, confirms delivery notes and

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		Purchasing Representative		invoices, and records entries in the raw material ledger
Related persons (Operational level)	Each Line Leader	Production Department	Day-to-day operation (Operational level)	Ensures compliance with rules at each workstation, checks labels and dates, identifies and controls defective and discarded products, and detects and reports abnormalities or suspicious events at an early stage
Employees / part-time workers / temporary workers	All	Production Department, Packaging Department, etc.	Day-to-day operation	Follow instructed procedures and promptly report any abnormalities or suspicions
Reporting contact point	△△△ △	Plant Manager / President	Receipt of reports and consultations	Receives direct reports and consultations from employees and confirms and handles anonymous opinions and reports submitted through the plant suggestion box

2.2 Reporting Flow

The reporting flow when an abnormality or suspicious event potentially related to Food Fraud is identified within the plant shall be as follows:

Employees / part-time workers / temporary workers

→ Line Leader

→ Production Leader (alternate)

→ Plant Manager (Food Fraud Prevention Officer)

→ President, as necessary

Where an anonymous submission is made through the suggestion box, the Plant Manager shall collect it once a week and share it with the Production Leader and President according to the content.

Where there is suspected intentional fraud or where the issue may lead to product recall or shipment suspension, the Plant Manager shall immediately report to the President and discuss the response policy.

3. Vulnerability Assessment Results

3.1 Assessment Method

The assessment was conducted mainly by the Plant Manager, the Production Leader, and the Purchasing Representative, based on past trouble history, characteristics of raw materials and packaging materials, and transaction conditions, using the following perspectives:

- Scope: Raw materials, packaging materials and labels, disposal and re-distribution, and records management
- Likelihood of occurrence: High / Medium / Low (taking into account supply conditions, price fluctuations, degree of oversight, etc.)

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- Impact: High / Medium / Low (taking into account potential health harm, loss of social trust, economic loss, etc.)
- Overall evaluation: Determined as High / Medium / Low using the risk matrix

Details of the assessment results shall be recorded in the Food Fraud Vulnerability Assessment Sheet (VA Sheet) and retained together with this Plan.

3.2 Assessment Results

No.	Scope	Example	Anticipated fraud type	Likelihood of Occurrence	Impact	Overall Evaluation
1	Raw materials	Locally sourced vegetables, domestic pork, etc.	Falsification of origin or grade, substitution with other raw materials	Medium	Medium	Medium
2	Packaging materials and labels	Product labels, best-before date stickers	Use of obsolete labels, tampering with best-before dates, incorrect application of stickers	Medium	High	High
3	Disposal and re-distribution	Defective products, returned products, off-specification products	Taking away and reselling discarded products, improper use driven by a “too wasteful to throw away” mindset	Medium	Medium	Medium
4	Records management	Purchasing notes, shipment notes, simple Excel files, test records	Missing entries, later rewriting, deletion of inconvenient records	Low	Medium	Low to Medium

4. Control Policies

4.1 List of Control Policies

No.	Target	Main existing controls	Additional measures	Frequency / Timing	Responsible department / person	Verification method
1	Raw materials	Confirmation of delivery notes,	For major raw materials (pork, major vegetables, etc.), record “when, from where, and how much was purchased” for each lot in a one-page A4 raw material ledger. If	At each delivery / when market prices	Administration Department (Purcha	The raw material ledger shall be checked on a sample

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		appearance checks	market prices rise suddenly, the Plant Manager shall reconfirm purchasing conditions (origin, grade, unit price) only for the relevant raw materials and note the result in the ledger.	change sharply	single Representative / Plant Manager	basis once a year for missing entries and unnatural price fluctuations.
2	Packaging materials and labels	Arrangement of label shelves, simple inventory control	Obsolete or discontinued labels shall be marked with a “Do Not Use” sticker and stored together in a dedicated box at the back of the plant. Only the latest labels shall be kept on operational-level shelves. Best-before date stickers shall be color-controlled and only the daily required quantity shall be distributed to each line.	When labeling content is changed / before daily work	Production Department / Plant Manager	At annual inventory, the Plant Manager shall check the label shelves and the “Do Not Use” box for any mixing of obsolete versions.
3	Disposal and re-distribution	Preparation of disposal list	Defective products, returned products, and off-specification products shall be marked with conspicuous colored tape, and the “waste storage area” shall be fixed at one location within the plant (inside the west-side warehouse). At the time of disposal, the products shall be confirmed by both the responsible person and the Plant Manager, and the lot, quantity, date, and signatures of both persons shall be entered in the disposal record, together with one photograph where possible.	At each disposal	Production Department / Plant Manager	Disposal records and photographs shall be reviewed collectively once a year to confirm that there is no suspicion of re-distribution.
4	Records management	Records using paper notebooks and simple Excel files	Corrections shall be made using a double line, with the correction date and initials always entered. Major purchasing, shipment, and test records shall be checked by the Plant Manager once a month on a sample basis for blank pages, bulk entries, and unnatural corrections.	At the time of correction / once a month	Each responsible person / Plant Manager	Monthly confirmation results shall be noted briefly and used as reference in internal audits and self-inspections.

5. Training and Exercises

Training and exercises related to Food Fraud Prevention shall be implemented according to the following policy.

1. Basic Training

Target: All employees, part-time workers, and temporary workers

Content:

- What Food Fraud is (falsification of origin, tampering with dates, resale of defective products, etc.)
- Specific examples that could occur at this plant
- How to report abnormalities or suspicions

Frequency: Once a year (all-employee group training) and upon hiring

2. Job-Specific Training

Target: Purchasing Representative, Line Leaders, Production Leader

Content:

- Rules for completing the raw material ledger
- Methods for controlling labels and best-before date stickers
- Rules for disposal and records management, and how to retain records

Frequency: Once a year

3. Practical Exercises

Target: Frontline personnel and Line Leaders

Content:

- Exercise assuming confusion of best-before date stickers
- Exercise on response when waste products are about to be mixed with normal products
- Exercise on response when suspicious raw materials are found (unusually cheap, unfamiliar labels, etc.)

Frequency: Once a year

The implementation date, content, and participants of training and exercises shall be entered in the Training Record, which shall be retained by the Plant Manager.

6. Implementation, Verification, and Review

6.1 Implementation

The countermeasures specified in this Plan shall be implemented by each responsible person in routine operations and recorded in checklists and notebooks.

In particular, the following events must always be reported to the Plant Manager:

- Sharp changes in raw material prices or supply shortages
- Increase in mistakes or complaints relating to labels or dates
- Unnatural changes in the quantity or content of defective or returned products
- Blank spaces, bulk entries, or unnatural corrections in records

6.2 Verification

- Once a year, the Plant Manager, Production Leader, and Purchasing Representative shall conduct a simple internal audit (self-inspection).
- In the internal audit, the raw material ledger, label shelves, disposal records, and a sample of major records shall be checked to confirm whether they are operated according to the rules and functioning effectively.
- As necessary, feedback and complaints from major business partners shall also be reviewed to consider their relation to fraud risk.

6.3 Review

This Plan and the vulnerability assessment shall be reviewed in any of the following cases:

- At the annual periodic review (conducted based on the results of the internal audit)
- When raw material prices or supply conditions change significantly
- When new fraud cases are published by authorities or industry organizations
- When concerns regarding fraud arise through complaints, internal reports, or information from the local community

Where review results lead to changes in the raw material ledger format, label control methods, disposal rules, etc., the Plant Manager shall revise the documents and promptly communicate the changes to employees with explanation.

7. Document and Record Control

- This Plan shall be version-controlled by the Plant Manager, and the revision date, revised content, reason for revision, and approver shall be recorded on the inside cover.
- The latest version shall be accessible in the plant office file and near the operational-level bulletin board, and key points shall also be posted as a one-page A4 Summary Version of the Food Fraud Mitigation Plan.
- Each time this Plan is revised, consistency shall be checked with related procedures such as purchasing procedures, packaging material control procedures, disposal procedures, and records management rules.

The main related records and indicative retention periods are as follows:

- Raw material ledger: 5 years
- Inventory records for label shelves and obsolete label control records: 3 years
- Disposal and return records and photographs: 3 years
- Purchasing, shipment, and test records and correction histories: 5 years
- Training and exercise records: 3 years
- Internal audit and self-inspection records: 3 years

Retention periods shall be reviewed as necessary in light of legal requirements and contract conditions with major business partners.

End of Example Food Fraud Mitigation Plan: Type 3 – Community-Based, Single-Plant Model (SMEs / Specialized Processors)

Incident Cases (Examples of Actual Incidents)

Incident Case①: Meat Processor Fraud Case (Hokkaido, Japan)

Incident Case②: Melamine Contamination of Chinese Powdered Milk (China)

Incident Case③: European Horse Meat Adulteration Case (EU)

Incident Case④: Case Involving Livestock Products from Animals Treated with the Muscle-Building Agent Clenbuterol (China)

Incident Case⑤: Use of the Non-Food Dye Sudan Red (Asia and other regions)

Incident Case⑥: Knowing Shipment of Contaminated Products by a Peanut Ingredient Manufacturer (United States)

Incident Case⑦: Tampering with Best-Before Dates on Confectionery Products (Japan)

Incident Case⑧: Reuse of Fresh Confectionery and False Labeling (Japan)

Incident Case⑨: Use of Expired Raw Materials at a Western Confectionery Plant (Japan)

Incident Case⑩: Raw Meat Service and Labeling Problems at a Small to Mid-Sized Yakiniku Chain, and a Large-Scale Food Poisoning Outbreak (Japan)

Incident Case⑪: Sale of Boxed Meals After a Suspension Order by a Family-Run Restaurant, and Norovirus Food Poisoning (Japan)

Incident Case ①: Meat Processor Fraud Case (Hokkaido, Japan)

Overview:

A meat processing company in Hokkaido continued for many years the fraudulent practice of mixing pork, chicken, offal, and other materials into products labeled as “100% beef.” An investigation by the Ministry of Agriculture, Forestry and Fisheries revealed that not only false labeling but also numerous other fraudulent acts, including tampering with best-before dates, had been carried out systematically. The company eventually went bankrupt.

Suspected Background and Contributing Factors:

- The company appears to have sought to maintain high value-added products such as those labeled “100% beef” while suppressing raw material costs.
- When inventories ran short or prices rose, the practice of mixing in other animal species or lower-quality cuts and shipping them as beef appears to have become normalized under the direction of the president and senior management.
- Authority within the company was concentrated in part of top management, and the corporate culture appears to have prevented objections or internal reporting from functioning effectively.

Confirmed Methods:

- Mixing of different species and offal (substitution and blending of raw materials)
- False statements on product labels (e.g. “100% beef”)
- Improper labeling of best-before dates and specifications

How the Case Was Discovered:

The actual situation became clear through concerns raised by business partners, administrative investigations, and media reports, and systematic misconduct was confirmed during on-site inspections by the Ministry of Agriculture, Forestry and Fisheries.

Key Lessons and Implications:

- A system is needed to verify whether raw materials are being procured and used as declared, by reconciling procurement volumes, formulation ratios, and finished product yields.
- Measures to prevent tampering with information that can easily be manipulated through numbers, such as dates and specifications, are important, including system records and dual approval.
- Internal and external reporting channels, together with protection for reporters, should be clearly established so that employees can respond even to misconduct directed by top management.

Incident Case ②: Melamine Contamination of Chinese Powdered Milk (China)

Overview:

Some infant powdered milk products manufactured in China were found to contain melamine, an industrial chemical. Melamine was added in order to falsify protein test results for diluted raw milk, resulting in kidney disorders in many infants. More than 300,000 health-related cases and at least six deaths were reported.

Suspected Background and Contributing Factors:

- Purchase prices for raw milk were linked to protein content, measured as nitrogen content.
- Some milk collection and supply operators artificially increased apparent quality by adding melamine to raw milk diluted with water, thereby inflating nitrogen-based protein test values such as those obtained by the Kjeldahl method.
- The system was structured so that passing the test value was all that mattered, and receiving inspections at the factory level were also dependent on that assumption.

Confirmed Methods:

- Intentional addition of industrial melamine (Adulteration)
- Combined dilution with water and melamine

How the Case Was Discovered:

The problem came to light after repeated cases of kidney disorders and stones in infants, and melamine was detected in powdered milk through investigations by medical institutions and authorities.

Key Lessons and Implications:

- Purchase and evaluation systems that rely heavily on a single numerical criterion create motivation to manipulate that number itself.
- For key KPIs and test indicators, spot testing for substances such as melamine and audits of the raw material supply chain should be used in combination.
- For high-risk products such as infant foods, risk design must include fraud driven by economic motives.

Incident Case ③: European Horse Meat Adulteration Case (EU)

Overview:

Horse meat was found in frozen foods, meatballs, and other products labeled as beef across Europe. Horse meat processed at slaughterhouses in Romania and elsewhere was handled as beef as it moved through the supply chain, resulting in large-scale labeling fraud across the EU.

Suspected Background and Contributing Factors:

- Beef prices had risen, while horse meat was relatively less expensive.
- Some suppliers and intermediaries appear to have formed trading practices in which horse meat was sold as beef in pursuit of economic gain.
- It has been pointed out that some horses not originally intended for food use, such as racehorses or working horses, entered the meat supply chain after slaughter, and some may have had a history of treatment with the painkiller phenylbutazone.
- Because the supply chain spanned multiple countries and multiple operators, accountability for the animal species and origin of the raw material became unclear.

Confirmed Methods:

- Raw material substitution (horse meat sold and labeled as beef)
- Fraudulent documents and labeling by multiple operators (misrepresentation of origin and species)

How the Case Was Discovered:

The case began when Irish authorities detected horse DNA in processed products labeled as beef during DNA analysis, after which investigations expanded to other countries and contamination was confirmed across the EU.

Key Lessons and Implications:

- Falsifying the animal species or origin of raw materials increases not only fraud risk but also health risks such as exposure to residual veterinary drugs, including phenylbutazone.
- In multi-stage, multi-country supply chains, it is necessary to verify the consistency between documents and actual materials by combining DNA-based species identification with cross-checking of slaughter certificates, drug-use history, and other supporting documents.
- Selecting suppliers based only on price advantage structurally makes the same type of fraud more likely.

Incident Case ④: Case Involving Livestock Products from Animals Treated with the Muscle-Building Agent Clenbuterol (Pork and Beef)

Overview:

Clenbuterol, a beta-agonist muscle-building agent, is prohibited for use in food-producing animals in many countries. However, in the past, illegal administration to pigs and cattle in China, Europe, and elsewhere led to human health impacts and positive doping results. In China, for example, 336 people were reported to have shown symptoms of poisoning in Shanghai and other areas in 2006 after eating pork.

Suspected Background and Contributing Factors:

- Administration of clenbuterol produces leaner, more muscular carcasses, which can command higher market prices.
- Some producers appear to have used prohibited drugs shortly before shipment in order to improve yield and appearance while attempting to avoid detection.
- In regions with insufficient regulation and testing, or where distribution routes were complex, the risk of residues may have been underestimated, making illegal use easier to continue.

Confirmed Methods:

- Illegal use of prohibited drugs (Unapproved / Illegal production and use of unauthorized substances)
- Concealment of veterinary drug-use history and tampering with records
- Attempts to pressure business partners into concealment

How the Case Was Discovered:

Consumers showed symptoms such as palpitations and tremors, and medical institutions and authorities detected clenbuterol in meat. Cases in which athletes' doping tests suggested the possibility of contaminated meat consumption have also led international bodies to issue warnings.

Key Lessons and Implications:

- Systems that place excessive value on appearance and yield can encourage fraud in the form of drug misuse.
- Management of veterinary drug use, including treatment records, withdrawal periods, and supporting documents, should be designed together with a residue testing system.
- When sourcing imported raw materials or products, supplier audits should take into account the regulatory level of the relevant country or region and its history of residue and violation cases.

Incident Case ⑤: Use of the Non-Food Dye Sudan Red (Asia and Other Regions)

Overview:

Curry powder, chili powder, and other products were found to contain Sudan Red (Sudan I–IV and related dyes), synthetic colorants not approved for food use. Recalls were conducted in the United Kingdom and other countries, and similar cases have continued to occur in parts of Asia and elsewhere. Sudan Red is suspected of carcinogenicity and is currently prohibited for food use in many countries.

Suspected Background and Contributing Factors:

- Sudan Red is oil-soluble and can produce a vivid red color in small amounts, allowing a visually striking appearance more cheaply than natural colorants.
- In some countries, similar azo dyes had once been used as food colorants, but were gradually banned as toxicological knowledge accumulated, with transitional periods in which regulations differed by country and region.
- Because of older practices and cost-driven priorities, there continued to be demand for the same color even after regulatory changes, and some suppliers mixed industrial colorants while presenting them as food-use materials.

Confirmed Methods:

- Intentional addition of non-food colorants (Adulteration)
- Mislabeling as “natural colorant,” etc.

How the Case Was Discovered:

Sudan Red was detected in chili products, sauces, and other items through import inspections and market sampling, leading to recalls and warnings in multiple countries.

Key Lessons and Implications:

- In products where appearance, such as color intensity, is highly valued, colorants become a typical Food Fraud hotspot.
- Supplier audits should go beyond documentation and verify such matters as approved food additive lists and warehouse and inventory control for non-food-use materials.
- Where regulations differ between countries, import controls should be designed on the assumption that industrial materials prohibited domestically may still be circulating elsewhere, including analytical testing and verification of supporting documents.

Incident Case ⑥: Knowing Shipment of Contaminated Products by a Peanut Ingredient Manufacturer (United States)

Overview:

This case involved peanut products, including peanut paste, associated with a U.S. peanut ingredient manufacturer that became the source of a multi-state outbreak of *Salmonella Typhimurium* in 2008–2009. The U.S. Centers for Disease Control and Prevention (CDC) reported 714 infections across 46 states and 9 deaths. In the subsequent criminal case, related individuals were found guilty and sentenced for deceiving customers by shipping product before microbiological test results were known, and by falsifying test results or using false certificates of analysis.

Suspected Background and Contributing Factors:

- Under strong pressure to maintain transactions, meet delivery deadlines, and avoid shipment stoppages, the rule of “wait for confirmation of negative results” became vulnerable to breakdown.
- When operations come to focus only on having a piece of paper showing a “negative result,” controls become easily hollowed out through shipment before results are available or manipulation of documentation.

Confirmed Methods:

- Shipment of peanut products before microbiological test results were available
- Shipment of product that tested positive for *Salmonella*, or use of falsified test results or false microbiological reports in connection with such shipment
- Forgery or tampering of COAs (Certificates of Analysis) used as proof of lot negativity

How the Case Was Discovered:

After infections spread across multiple states, epidemiological investigation and testing by the CDC and others indicated a link to the peanut products. Subsequent regulatory investigation and criminal proceedings highlighted inconsistencies between testing, shipment, and documentation, including shipment prior to results and false test results.

Key Lessons and Implications:

- Rather than waiting to determine whether contamination was knowingly shipped, businesses should establish a rule that product is not shipped while results are still pending. If exceptions are ever permitted, dual approval, records, and clear shipment-stop authority are essential.
- Operating on the basis of trusting a COA alone is dangerous. A COA should be checked not only for existence, but also for lot consistency, originality, evidence that testing was actually conducted, resistance to tampering, and consistency with manufacturing and shipment records.
- Continuing shipment while deceiving customers through test results or documents can ultimately be judged as intentional conduct and lead directly to criminal penalties, enormous losses, and existential risk to the company.

Incident Case ⑦: Tampering with Best-Before Dates on Confectionery Products (Japan)

Overview:

A confectionery manufacturer engaged over a long period in tampering with best-before dates and re-shipping nonconforming products, ultimately leading to the recall of all products and a shipment stop. Although no widespread health harm was confirmed, products were distributed beyond their intended shelf life, raising concerns about quality deterioration and safety.

Suspected Background and Contributing Factors:

- There appears to have been management and sales pressure to avoid stockouts and returns as much as possible.
- Production planning and inventory management seem to have been inadequate, resulting in unsold products and unanticipated excess inventory.
- It has been suggested that the idea that “if it looks fine, it can still be shipped” spread within the organization, and that the practices of extending best-before dates and repackaging became accepted over a long period.

Confirmed Methods:

- Tampering with labeling by extending or replacing the date on best-before labels
- Repackaging and re-shipment of products once judged nonconforming, such as packaging-defective items

How the Case Was Discovered:

Improper practices were confirmed through an investigation by administrative authorities and the company’s own internal investigation, and the results were made public.

Key Lessons and Implications:

- Best-before dates are established with consideration of not only quality but also safety, and arbitrary extension undermines that premise.
- Especially for flagship products, pressure to reduce inventory loss tends to be strong, and “just this once” exceptions can easily become routine. Management should therefore assume this risk in advance.
- Management review should address business indicators such as disposal volumes and return volumes together with date-control rules, and top management should clearly define the line that must never be relaxed.
- The same type of pressure may arise at many confectionery and souvenir manufacturers, making this a useful case for reviewing whether the same structure could arise in one’s own company.

Incident Case ⑧: Reuse of Fresh Confectionery and False Labeling (Japan)

Overview:

A confectionery manufacturer froze unsold and returned fresh confectionery products, reheated them, and re-shipped them. At that time, manufacturing dates and use-by dates were displayed with dates different from the actual ones. Because the products involved were highly perishable fresh confectionery items and reuse was repeated, the case was regarded as one with a high food hygiene risk due to possible microbial growth.

Suspected Background and Contributing Factors:

- The business was highly affected by weather and customer traffic, making unsold inventory likely, while the short shelf life of fresh confectionery meant that disposal loss placed a heavy burden on management.
- In the effort to reduce waste, the thinking that “if it looks fine, it may be reused” appears to have gradually spread and become an organizational habit.
- Reports suggested that top management was aware of the reuse practice, indicating that the corporate culture may have made it difficult for employees to object.

Confirmed Methods:

- Freezing products returned from stores or business partners, reheating them, and re-shipping them
- Displaying manufacturing dates and use-by dates different from the actual ones, or replacing labels

How the Case Was Discovered:

Administrative investigation confirmed the reuse of unsold products and false labeling, and the findings were made public.

Key Lessons and Implications:

- For products with a short shelf life, such as fresh confectionery and deli items, if the balance between waste reduction and food safety breaks down, operations can quickly shift toward reuse and falsification of dates.
- It is important not to leave reuse decisions to frontline judgment, but to define in advance which items and conditions must never be reused and to fix them in procedures.
- When top management is involved, it is extremely difficult for the operational level alone to correct the misconduct, making it necessary to establish multiple reporting and consultation routes, including internal reporting and external contact points.
- The same structure can arise in many local confectionery shops and small-scale prepared food plants, making this a typical case for reviewing inventory and disposal management.

Incident Case ⑨: Use of Expired Raw Materials at a Western Confectionery Plant (Japan)

Overview:

At a Western confectionery plant, raw materials such as milk and dairy products past their best-before or use-by dates were used in manufacturing. At the same time, deficiencies were found in temperature control and hygiene management procedures, leading to large-scale recall and suspension of plant operations. Because high-risk raw materials such as dairy products were used beyond their shelf-life limits, the case was regarded as a serious food safety incident.

Suspected Background and Contributing Factors:

- Milk, cream, and other dairy raw materials that had passed their best-before or use-by dates appear to have been used in production as they were, or after heat treatment.
- Inventory control for refrigerated and frozen materials was inadequate, making expiration overruns likely, and there seems to have been a perception at the operational level that “if it is heated, it can still be used even if slightly expired.”
- It was reported that required temperature control, cleaning, and inspection were not sufficiently performed, and that records were inadequate and did not accurately reflect the actual situation.

Confirmed Methods / Problems Identified:

- Use of raw materials such as dairy products after their best-before or use-by dates in production
- Failure to implement required hygiene and temperature control procedures, or operating them inadequately, with the actual situation not being properly reflected in records

How the Case Was Discovered:

The issue came to light after media reports triggered an on-site investigation by administrative authorities, which confirmed the use of expired raw materials and problems in hygiene management. As a result, product recalls, plant shutdown, and changes in management were announced.

Key Lessons and Implications:

- The assumption that “if a raw material is only slightly expired, it is safe if heated” is risk-taking without scientific verification and is incompatible with food safety management principles.
- Although waste reduction and cost control are important, management must clearly state non-negotiable premises such as “expired raw materials must not be used” and “hygiene control procedures are not subject to cost-cutting.”
- Even where procedures, training, and records exist, operation can easily become hollow if they do not match actual staffing levels or equipment conditions, so internal audits and management reviews must continually confirm the operational reality.
- Similar pressure and structure can arise in small and medium-sized Western confectionery plants and bakeries handling dairy products, and should be considered as one’s own risk rather than a problem unique to a specific company.

Incident Case ⑩: Raw Meat Service and Labeling Problems at a Small to Mid-Sized Yakiniku Chain, and a Large-Scale Food Poisoning Outbreak (Japan)

Overview:

At a regional small to mid-sized yakiniku chain, large-scale food poisoning caused by enterohemorrhagic *E. coli* O111 and O157 occurred after raw meat dishes such as yukhoe were served, resulting in many patients and multiple deaths. It became an issue that beef meant to be handled as “for cooking” was served as a “raw meat menu,” and that leftover yukhoe was re-served, indicating underestimation of risk against a background of economic motives.

Suspected Background and Contributing Factors:

- Raw meat menu items were maintained because they were believed to increase customer spend and improve visual appeal.
- The beef being purchased should originally have been handled as “for cooking,” but store-level operations appear to have used it for raw dishes such as yukhoe without adequate trimming and sanitizing processes for raw consumption.
- Practices such as re-serving unsold yukhoe the next day appear to have become normalized in order to reduce inventory loss.
- Because it was a small chain, the quality assurance function and dedicated hygiene management personnel were weak, and decisions by owners and store managers were likely to translate directly into operating practice.

Confirmed Methods / Problems Identified:

- Serving beef intended for cooking as if it were suitable for raw consumption
- Failure to implement hygiene measures required for raw consumption, such as surface trimming, separation of utensils, and periodic testing
- Increased risk due to reuse of inventory, such as serving leftover yukhoe the following day

How the Case Was Discovered:

Multiple customers who had eaten the yukhoe developed severe diarrhea and abdominal pain, prompting reports to medical institutions and public health centers. Follow-up investigation determined that this was a multi-store food poisoning outbreak, leading to administrative action and criminal liability proceedings.

Key Lessons and Implications:

- Relaxed operation of guidelines and labeling rules on the grounds that “we are a small restaurant” or “we have many regular customers” can immediately lead to fatal consequences.
- In particular, if scientific requirements regarding raw-consumption menu items cannot be met, the appropriate decision is not to offer such items at all.
- If management advantages such as appearance, higher customer spend, and reduced waste are prioritized to the point that operations continue on the assumption that “a little should be okay,” the result can be a risk large enough to destroy the business itself.

Incident Case ⑪: Sale of Boxed Meals After a Suspension Order by a Family-Run Restaurant, and Norovirus Food Poisoning (Japan)

Overview:

At a family-run Japanese restaurant in Osaka Prefecture, norovirus food poisoning occurred due to both dine-in meals and catered boxed meals, resulting in approximately 70 to 80 patients in total. It was later discovered that, even after the public health office had issued a suspension order, the restaurant continued to sell boxed meals secretly. Members of the owner's family were arrested on suspicion of violating the Food Sanitation Act.

Suspected Background and Contributing Factors:

- In early February, many customers who had eaten meals or boxed lunches from the restaurant developed diarrhea, abdominal pain, vomiting, and other symptoms, and norovirus was detected. In response, the authorities imposed a two-day suspension order.
- The restaurant is reported to have continued selling boxed meals during the suspension period because of concern over loss of revenue during a busy season.
- Additional patients later occurred, and norovirus was again detected, leading to a longer suspension and pursuit of criminal responsibility.

Confirmed Methods / Problems Identified:

- Continuing business and selling boxed meals in defiance of an official suspension order (Unapproved / illegal production and improper distribution)
- Reported inadequacies in the hygiene controls required for norovirus prevention, including hand hygiene, handwashing after toilet use, cleaning of the kitchen, and handling of vomit
- Because it was a small family-run operation, hygiene management depended heavily on the awareness of the owners and family employees, and once the attitude of "it's not a big deal" took hold, it became structurally difficult to correct

How the Case Was Discovered:

The public health office began its investigation following reports from multiple patients with food poisoning symptoms. Through common exposure history, the restaurant and boxed meals were identified as the source, and the suspension order and subsequent violation became the subject of media coverage and criminal investigation.

Key Lessons and Implications:

- Suspension orders and improvement orders issued by authorities when food poisoning occurs are the minimum line necessary to prevent secondary harm, and take priority over concerns such as protecting sales. Continuing operations despite such orders constitutes risk-taking close to intentional conduct.
- In family-run or small establishments, there is a tendency to interpret rules "in our own way" for reasons such as "we already have reservations" or "they are regular customers," but suspension orders based on law must be treated as absolute requirements.
- Given the reality that pathogens such as norovirus cannot be detected by sight or smell, employee health management, provision of toilet and handwashing facilities, and zoning of raw-food and plating processes must not be simplified for reasons such as "we are family" or "we have too few staff."

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Appendix 1: Examples of Fraud Methods

Rule of thumb: Fraud is more likely to occur where there is financial gain (“it makes money”), ease of execution (“easy to mix in or manipulate”), and low detectability (“hard to detect”).

Example of fraud method	Description (what is done)
Substitution	Replacing an expensive raw material with a cheaper one, or mixing in a different raw material
Dilution	Adding water or diluting with a cheaper base material
Adding something to make it look better	Adding substances to make color, aroma, or compositional values appear more desirable
Saying it is not mixed when it actually is	Misrepresenting mixing ratios or falsely claiming a single raw material
Misrepresentation of place of origin, country of origin, or variety	False claims such as domestic origin, specific regional origin, or single-variety origin
Misrepresentation of grade or quality	False claims regarding grade, compositional specifications, or conformity to standards
Misrepresentation of certification or labeling	False claims about certifications held by the organization
Manipulating weight	Increasing weight by adding water, insufficient drying, adding filler or cushioning materials, etc.
Manipulating dates	Extending best-before or use-by dates, relabeling, or repackaging
Manipulating records or documents	Tampering with test reports, claiming testing was done when it was not, using documents from another lot, or other document fraud
Diverting genuine products through another route	Unauthorized distribution, mixing in stolen goods, or distribution through unidentified routes
Fake brands or fake packaging	Imitation of outer packaging, labels, or lot markings, or impersonation of genuine products

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Appendix 2: Examples of Products Vulnerable to Fraud

Rule of thumb: Fraud is more likely in products where the price gap is large, they are easy to mix (powders and liquids), they are difficult to distinguish after processing, or their labeling value is high (origin, certification, etc.).

Type of product vulnerable to fraud	Representative examples
Oils, fats, and seasonings (high value-added)	Olive oil (e.g. extra virgin), sesame oil and other premium edible oils, balsamic vinegar, fish sauce and other fermented seasonings, vanilla (beans / extract)
Sweeteners and sugars	Honey, maple syrup, fruit juice / concentrated fruit juice (orange, apple, etc.)
Spices and herbs (powders)	Pepper, cumin, turmeric, paprika, chili, oregano, mixed spices
Seafood (where species is difficult to distinguish after processing)	White fish fillets, surimi and processed seafood products, tuna species, eel, shrimp, crab
Livestock and animal-derived products (where origin and labeling are tied to value or regulatory significance)	Beef, pork, chicken, processed meat, gelatin, collagen, and other animal-derived raw materials
Grains and powdered raw materials (easy to mix / often document-dependent)	Rice with claimed origin or variety, flour, starch, plant protein (such as soy), dairy ingredients (milk powder, whey, etc.)
Luxury and high-priced raw materials	Coffee, cocoa, tea
Products whose price is created by certification or labeling value	Organic-certified products and regional brand products

4. Q&A

1. Basic Understanding

Q1: How is Food Fraud Prevention different from Food Defense?

Q2: Even if HACCP is functioning, why can fraud still occur?

Q3: Can something still be regarded as Food Fraud even if it was done with good intentions?

2. The Structure of Risk and How to Identify Warning Signs

Q4: Under what circumstances is Food Fraud more likely to occur?

Q5: What kinds of “uneasiness” or warning signs can indicate Food Fraud?

Q6: To what extent is it possible to detect Food Fraud?

Q7: Can fraud involving frontline personnel or internal personnel be prevented?

Q8: Can a company’s own systems detect fraud involving top management?

3. Practical Evaluation and Management

Q9: How should priorities for fraud risk be determined?

Q10: How should “likelihood of occurrence” be evaluated?

Q11: How detailed should the risk assessment be?

Q12: What should be checked in particular when introducing a new raw material or supplier?

Q13: To what extent can analytical and testing techniques prevent Food Fraud?

Q14: What are the key points of fraud prevention that can be implemented even by SMEs or single-plant operations?

Q15: How should an appropriate “level of control” be determined for the company?

4. Response When Fraud Is Suspected or Confirmed

Q16: When there is a suspicion of fraud, what should be given highest priority first?

Q17: Is it acceptable to stop product even before conclusive proof has been obtained?

Q18: If fraud is confirmed, how far back should investigation and recall extend?

5. Organizational Culture, People, and Systems

Q19: Is Food Fraud Prevention only the responsibility of the quality function?

Q20: How much education and training is enough?

Q21: How should an atmosphere in which people hesitate to report fraud be improved?

Q22: If a whistleblowing system is established, can it be assumed to function automatically?

Q23: To what extent can fraud driven by economic reasons or “good intentions” be prevented?

Q24: Is “perfection” possible in Food Fraud Prevention?

1. Basic Understanding

Q1: How is Food Fraud Prevention different from Food Defense?

A1: Food Defense is an approach to protecting food from attacks whose purpose is to cause harm, such as terrorism or sabotage. Food Fraud Prevention is an approach to deterring and detecting intentional misconduct carried out for economic gain, such as substitution, dilution, false labeling, and document fraud. Both deal with intentional acts, but the motives and the main ways in which risk manifests itself are different.

Q2: Even if HACCP is functioning, why can fraud still occur?

A2: HACCP is a system for controlling accidental contamination and procedural errors, and it is not designed on the assumption that people will intentionally conceal misconduct. Fraud is rooted in human intent and judgment, such as economic pressure, performance targets, and organizational culture, and therefore cannot be fully addressed by HACCP alone. For that reason, a separate framework and culture-building approach for Food Fraud Prevention is required.

Q3: Can something still be regarded as Food Fraud even if it was done with good intentions?

A3: Yes. Typical examples include the following:

- The supply situation for raw materials changed, and the origin or variety was changed, but in order to reduce effort for both parties, the labeling and specifications were left unchanged.
- The formulation ratio was changed with the intention of maintaining or improving quality, but in order to reduce the effort involved in making changes, the revised content was not reflected in the labeling, specifications, or contract.
- A company judged on its own that “quality has actually improved” and shipped the product without disclosing the change.

In such cases, even if the parties involved believe they are acting “for the consumer” or “to secure supply,” the result may still be:

- origin or ingredient labeling that does not match reality,
- deviation from contract specifications agreed with business partners, or
- inconsistency between allergen labeling and the actual contents.

In legal and commercial terms, such cases may still be judged as false labeling, that is, Food Fraud.

2. Structure of Risk and How to Detect Warning Signs

Q4: Under what circumstances is Food Fraud more likely to occur?

A4: The risk of Food Fraud increases when multiple factors overlap. In particular, the following situations are typical:

1. When economic pressure is strong

- Sharp increases in raw material prices or severe supply shortages
- Strong demands for major price reductions or intense price competition
- Performance targets or evaluation systems that strongly emphasize high yield and low cost

2. When the supply chain structure makes oversight difficult

- Multiple layers of intermediaries and outsourced parties
- Dependence on overseas sites or overseas suppliers, making the actual conditions difficult to see
- Heavy reliance on supporting documents and records, with limited ability to confirm actual materials or operations

3. When the organizational culture makes reporting or consultation difficult

- A perception that pointing out problems will lower one's evaluation or lead to blame
- Messages prioritizing target achievement are strong, while messages about safety and legal compliance are weak
- Expressions such as "just this time as an exception" or "let's prioritize shipment for now" have become normalized

The more these factors overlap, the higher the vulnerability, that is, the ease with which fraud can occur.

Q5: What kinds of "uneasiness" or warning signs can indicate Food Fraud?

A5: Changes such as an unusually low price compared with market levels, a sudden improvement in yield, or unexplained changes in color or flavor should be treated as warning signs. Other possible signals include long-term retention of obsolete labels, operation based only on copies of supporting documents, or frequent record corrections where the stated reasons are merely formal. Each sign may appear minor on its own, but when multiple inconsistencies or uneasy signs overlap, it is important to stop and verify the situation.

Q6: To what extent is it possible to "detect" Food Fraud?

A6: It is difficult to detect every case of fraud, but it is possible to create a condition in which fraud is easier to detect. The foundation is routine confirmation of basic consistency, such as the relationship between incoming raw material quantities and outgoing product quantities, alignment between labeling and reality, and consistency between price and specification. On top of this, it is effective to apply DNA analysis or compositional analysis selectively to high-risk items, and to combine this with a culture in which people stop and verify when something feels wrong.

Q7: Can fraud involving frontline personnel or internal personnel be prevented?

A7: It is difficult to reduce such cases completely to zero, but it is possible to make them less likely to occur and easier to detect early if they do occur. Important measures include segregation of authority (for example, separating input, approval, and storage functions), record formats and systems that leave evidence of tampering, and reporting routes that are easy to use. Training and messages that position "finding and reporting misconduct" as a contribution to the organization are also essential.

Q8: If top management is involved in fraud, can the company's own systems detect it?

A8: Fraud led by top management or senior personnel is very difficult to detect through internal systems alone. For this reason, it is important to regularly incorporate **external eyes**, such as third-party certification, customer audits, and external laboratories. At the same time, top management itself must clearly state that safety and legal compliance take priority over all else, and must show a stance that does not tolerate behavior inconsistent with that message. This itself becomes an important deterrent.

3. Practical Evaluation and Management

Q9: How should priorities for fraud risk be determined?

A9: It is effective to evaluate fraud risk using two axes: likelihood of occurrence (how easily fraud can be successfully carried out) and impact (the damage if it occurs), and to organize the results in a matrix. Even if likelihood is low, if the possible health impact or social impact is large, the priority

should be raised and countermeasures should be considered. Conversely, where both are low, simpler measures may be sufficient, allowing resources to be focused on higher-priority risks.

Q10: How should “likelihood of occurrence” be evaluated?

A10: Likelihood of occurrence can be evaluated as the combination of how easily fraud can be carried out and how difficult it is to detect.

① Ease of occurrence (motive, opportunity, incentive)

- Economic: Are prices rising or supplies unstable, making it easier to resort to misconduct?
- Organizational: Are supplier management and audits weak, leaving loopholes?
- Technical: Given the nature of the raw materials or process, is substitution, dilution, or blending easy to carry out?
- Ethical: Is the ability to deter misconduct weak because of inadequate training, weak leadership attitude, or a weak reporting system?

② Difficulty of detection (can it be found quickly and reliably?)

- Testing and analysis: Are the existence, frequency, and methods of testing appropriate, and are they designed to detect the relevant fraud?
- Consistency and traceability: Are lot control, inbound/outbound movement, inventory, and yield consistent, and can records be reconciled with reality?
- Audits and monitoring: Are audit frequency, unannounced checks, physical verification, and change control properly implemented?

Q11: How detailed should the risk assessment be?

A11: At the first stage, it is better to organize the assessment at a broad unit level—for example, raw materials, packaging materials, labeling, suppliers, and so on—and prioritize making the major risks visible. If everything is assessed in excessive detail from the outset, the system often becomes difficult to sustain. A practical approach is to start broad and then gradually add detail only to those areas judged to be higher risk. In Food Fraud Prevention in particular, it is important to choose a level of detail that can be continued in practice.

Q12: What should be checked in particular when introducing a new raw material or supplier?

A12: It is important not only to check whether supporting documents exist, but also to confirm their reliability and consistency. The origin of the raw material (country / region, species, manufacturing site), the consistency of price with market conditions, and the existence of audit history or certification should all be reviewed together, and the basis for trust should be recorded concisely. Where the risk is high, additional analysis of the first lot or early on-site confirmation should also be considered.

Q13: To what extent can analysis and testing technology prevent Food Fraud?

A13: Analysis and testing are not complete preventive measures in themselves, but rather powerful tools for confirming suspicious items. It is not realistic to apply highly sophisticated analysis to every lot, so such methods should be focused on high-risk raw materials or items with a history of problems. Most important is an organizational culture and decision-making structure that allows the company to stop when it should stop based on the results.

Q14: What are the key points of fraud prevention that can be implemented even by SMEs or single-plant operations?

A14: Rather than relying on expensive equipment, it is effective to thoroughly implement basic controls such as key control, segregation of packaging materials and obsolete labels, and centralized control of discarded and returned products. Simple procedures should also be established so that, when abnormalities or concerns are identified, products or materials can be temporarily isolated and the matter can immediately be discussed with a supervisor or the quality representative. In smaller organizations, face-to-face communication and an atmosphere in which people can easily speak up can be a major strength.

Q15: How should an appropriate “level of control” be determined for the company?

A15: The appropriate level of control should be judged by balancing the magnitude of the risk, the level of expectation from inside and outside the company, and the resources available, while taking into account company size, product characteristics, and supply chain complexity. It is not realistic to apply the highest possible level to every area. A more practical approach is to apply strong controls to high-risk areas and simpler controls to lower-risk areas. The level of control should also not be seen as fixed once and for all, but as something to be adjusted through review.

4. Response When Fraud Is Suspected or Confirmed

Q16: When there is a “suspicion” of fraud, what should be given highest priority first?

A16: First, the related products, raw materials, and records should be secured without moving them unnecessarily—that is, isolated and preserved. Next, the matter should be reported through the defined internal route (for example, to the supervisor and the quality function), and the situation should be recorded. Rather than “waiting to see until the facts are fully confirmed,” it is important to stop at the stage of suspicion in order to prevent expansion of damage.

Q17: Is it acceptable to stop product even before conclusive proof has been obtained?

A17: Yes. Where there is suspicion of Food Fraud and there may be implications for food safety or legal compliance, the basic rule is to stop even before certainty has been obtained. A temporary shipment hold can be explained afterward, whereas releasing dangerous product to the market may be irreversible. In practice, when an abnormality is first identified, it is usually impossible to determine immediately whether it is Food Fraud. Therefore, even if it is not yet known whether fraud is involved, if there appears to be a problem with the product, the product-related response should be taken without waiting for a final fraud determination.

Q18: If fraud is confirmed, how far back should investigation and recall extend?

A18: The scope should not be limited only to the period for which fraud has been directly confirmed. It is also necessary to consider the period during which products involving the same method, the same persons involved, or the same suppliers were shipped. As a rule, by reconciling raw material lots, manufacturing lots, and shipment records, the company should investigate and recall the range for which suspicion cannot reasonably be excluded. Where judgment is difficult, the company should seek advice from authorities or specialists and make a decision from the consumer’s perspective.

5. Organizational Culture, People, and Systems

Q19: Is Food Fraud Prevention only the responsibility of the quality function?

A19: No. Fraud is deeply connected with organizational decision-making and commercial conditions

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across procurement, manufacturing, logistics, sales, and management. The quality function plays a central role as the specialist in systems and evaluation, but actual risk often arises in the operational setting, in purchasing, and in management decisions. Therefore, fraud prevention must be positioned as a company-wide management issue rather than as a matter for the quality function alone.

Q20: How much education and training is enough?

A20: In practice, once-a-year classroom-based basic training alone is often insufficient to change behavior at the operational level. In addition to basic education (the concept of fraud, laws, and case examples), it is desirable to combine practical training based on the company's own procedures with simple role-play or case-based exercises. Designs that emphasize continuity are important—for example, short but regular training, and supplementary training when new products or new suppliers are introduced or when the market situation changes.

Q21: How should an atmosphere in which people hesitate to report problems be improved?

A21: Ease of reporting should not depend on an individual's "courage," but should be supported by the organization's systems and atmosphere. The main points are as follows:

1. Clear messages from top management

- Top management should repeatedly communicate that "early identification and reporting of problems is a contribution to the organization" and that "concealment will not be tolerated."
- These messages should be communicated consistently through newsletters, morning meetings, bulletin boards, and similar means, so that the premise that "it is acceptable to report" is widely shared.

2. Clear documentation that reporting does not equal punishment (Just Culture)

- Rules and reporting procedures should clearly state that no disadvantage will be imposed merely because a person made a report, and this should be communicated throughout the organization.
- It should be a principle that not only the individual, but also organizational factors such as weak systems or insufficient training are always examined.

3. Multiple reporting and consultation routes

- In addition to the direct supervisor, there should be multiple options such as the quality function, the compliance contact point, anonymous reporting, and, where necessary, external contact points.
- These routes should be presented not only as channels for "formal reporting," but also as places where people can "consult first."

4. Training for managers on how to receive reports

- Managers should be trained not to respond emotionally or defensively when receiving a report, but to **listen → organize → show the steps for fact confirmation**.
- The way managers handle reports should itself be reflected in the evaluation of managers.

5. Sharing of positive examples

- After anonymization, the organization should share cases where reporting allowed a risk to be prevented at an early stage, thereby showing concretely the value of reporting behavior.

In this way, the difficulty of reporting should not be treated as a personal problem. Rather, building the conditions in which people can raise concerns safely is the foundation of fraud prevention.

Q22: If a whistleblowing system is established, can it be assumed to function automatically?

A22: No. A whistleblowing system itself is only a container; it does not function simply by being set up. It only begins to function when reports are handled promptly and fairly, when results and lessons learned are fed back to the operational level, and when reporters are reliably protected. Only then does the experience of “I’m glad I reported” begin to develop. The foundation that supports such operation is a Food Safety Culture that does not conceal inconvenient facts and values learning over blaming individuals.

Q23: To what extent can fraud driven by economic reasons or “good intentions” be prevented?

A23: Fraud driven by economic motives may at times involve top management and may be concealed in a deliberate and organized manner. For that reason, it is not realistic to aim to detect everything. What should instead be aimed for is:

- ① creating an environment in which fraud is less likely to occur, and
- ② ensuring that, if it does occur, it can be noticed early and stopped.

The following three points are particularly important:

1. Do not ignore “conditions that feel unnatural.”

First, it is important to establish fair trading arrangements with suppliers and maintain good relationships. On that basis, by sharing information on raw material prices, market conditions, yields, and profit margins, the organization can build a culture in which people stop and verify when they feel, “At these conditions, genuine product may not be feasible.” Excessive cost-down demands or transactions that lead people to feel, “This price and this quality do not make sense together,” can become a breeding ground for fraud.

2. Understand that even responses taken “with good intentions” due to lack of knowledge can create risk.

For example, if a company changes a raw material in response to supply disruption and decides that “quality is even better, so the labeling can remain unchanged,” this may still constitute fraud in the sense that the labeling no longer matches reality. In such cases, people involved may have little awareness that they are creating food safety risk, yet they may be introducing risks not assumed in the original safety design, such as allergens, residual pesticides, or veterinary drugs. What matters is not whether the intent was good, but whether the change remains consistent with the label, specifications, and procedures, and whether it changes the basis on which safety was originally assessed.

3. Make it a shared understanding that this is a legal-compliance issue and a business-survival risk.

Many fraudulent acts constitute violations of labeling or other food-related laws, and may lead directly to administrative sanctions, criminal liability, suspension of transactions, or bankruptcy. They should not be treated as “small compromises” or “devices to make the numbers work,” but recognized as acts that can create unexpected food safety risks and threaten the company’s credibility and survival. This understanding must be repeated and shared, including with top management.

In this way, rather than assuming that complete detection is possible, a practical approach is to build both the ability to notice unnatural conditions and inconsistencies (economic, technical, and labeling-related) and the environment in which such concerns can be safely discussed and reported.

Q24: Is “perfection” possible in Food Fraud Prevention?

A24: In reality, it is impossible to create a condition in which it can be said that “fraud will never occur.” What should instead be aimed for is a resilient system that reduces the likelihood of fraud as much as possible and allows early detection and correction if it does occur. For that reason, continually operating the cycle of risk assessment, countermeasures, training, reporting, and audit is itself the most important Food Fraud Prevention measure.

5. LINKS

1. Official Domestic Information Sources

(Sources for collecting incident cases)

Consumer Affairs Agency (CAA) | Recall Information Website

<https://www.recall.caa.go.jp/>

Ministry of Agriculture, Forestry and Fisheries (MAFF) | Initiatives on Food Labeling

<https://www.maff.go.jp/j/syouan/hyoji/index2.html>

Ministry of Health, Labour and Welfare (MHLW) | Search System for Public Recall Cases (Food, etc.)

https://ifas.mhlw.go.jp/faspub/IO_S020501.do

Ministry of Agriculture, Forestry and Fisheries (MAFF) | FCP “Points for Collaboration”

https://www.maff.go.jp/j/shokusan/fcp/whats_fcp/kyoudou.html

2. International Frameworks and Core Documents

(Sources for aligning basic concepts and approaches)

GFSI | Food Fraud Technical Document

<https://mygfsi.com/wp-content/uploads/2019/09/Food-Fraud-GFSI-Technical-Document.pdf>

SSAFE | Food Fraud Vulnerability Assessment Training Modules

<https://www.ssafe-food.org/tools/food-fraud-vulnerability-assessment-training-modules>

USP | Food Fraud Mitigation Guidance

<https://www.usp.org/sites/default/files/usp/document/our-work/Foods/food-fraud-mitigation-guidance.pdf>

FDA | Economically Motivated Adulteration (EMA)

<https://www.fda.gov/food/compliance-enforcement-food/economically-motivated-adulteration-food-fraud>

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Appendix: Food Fraud Mitigation Plan [Template]

Issue Date: ____ / ____ / ____

Version: ____

Prepared by: _____ (Position: _____)

Approved by: _____ (Position: _____)

1. Purpose and Scope

1.1 Purpose (to be completed)

The purpose of this Plan is to reduce food safety risks arising from **Food Fraud** driven by economic motives, such as substitution, dilution, false labeling, document fraud, and improper distribution, and to ensure the safety and trust of consumers and business partners.

Add, as necessary, the relationship to the company's own policy or management policy.

Example:

- "This Plan gives concrete effect to the Company's Food Safety Policy and Compliance Policy."
→ ()

1.2 Scope (to be completed)

- **Covered process steps** (example)
Example: procurement of raw materials and packaging materials / receipt / storage / production / packaging and labeling / shipment / disposal and re-distribution / logistics
→ ()
- **Covered facilities** (example)
Example: plant, packaging material warehouse, finished product warehouse, logistics center, shared logistics hub, etc.
→ ()
- **Covered outsourced parties** (tick as applicable)
 - Raw material / packaging material suppliers
 - Contract manufacturers (OEM, private-brand manufacturers, etc.)
 - External warehouses / logistics providers
 - External testing / analytical laboratories
 - Other: ()
- **Covered information and records** (example)
Example: specifications, supporting documents (CoA, certificates of origin), test records, manufacturing records, purchasing and shipment records, label artwork data, records in core business systems, etc.
→ ()

Add or delete items as appropriate to reflect the actual circumstances of the company.

2. Responsibility Structure

2.1 List of Responsible Persons (to be completed)

Category	Name	Department / Site	Role	Main responsibilities (summary)
Food Fraud Prevention Officer (Head Office / Plant)		(Example: Quality Assurance Department / Plant)	Overall control	- Establish and communicate the Food Fraud Prevention policy - Lead the Vulnerability Assessment and the development / review of this Plan
Alternate (Head Office / Plant)			Acts in the absence of the responsible person	- Make decisions and issue instructions in the absence of the responsible person - Consolidate abnormal and suspicious information
Department Manager (Purchasing / Procurement)		Purchasing / Procurement Department	Operation within the department	- Manage suppliers, contracts, prices, and supporting documents - Manage fraud risks relating to raw materials and packaging materials

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Department Manager (Quality Assurance)		Quality Assurance Department	Operation within the department	- Operate and inspect fraud prevention measures relating to testing, analysis, labeling, and records management
Department Manager (Production / Operations)		Production Department	Operation within the department	- Ensure compliance with rules and conduct routine checks at the operational level - Detect and report abnormalities and suspicions at an early stage
Information Systems / Records Management Representative		Information Systems Department, etc.	Information protection	- Manage access rights, audit trails, and backups for core systems and electronic records
Whistleblowing Contact Point (internal reporting / hotline)		(Example: Compliance Department, etc.)	Receipt of reports	- Receive and record reports and consultations - Communicate with related departments in accordance with reporting procedures

Delete unnecessary rows and add any categories needed for your company.

2.2 Reporting Flow (example / revise for company use)

- Person who identifies the issue → Frontline Supervisor / Team Leader → Department Manager (Quality / Purchasing / Production, etc.)
→ Food Fraud Prevention Officer (Head Office / Plant) → Senior Management / Corporate Communications and Legal (as necessary)
- Cases involving a **suspected intentional fraud** or a case that **may lead to recall or shipment suspension** shall be reported immediately to the Head Office Food Fraud Prevention Officer (or Senior Management).

→ Enter your company's reporting flow:

()

3. Summary of Vulnerability Assessment Results and Controlled Items

3.1 Assessment Method (to be completed)

- **Assessment targets** (tick as applicable)
 - Raw materials
 - Packaging materials and labels
 - Product labeling
 - Suppliers / contract manufacturers
 - Testing and analysis
 - Disposal and re-distribution
 - Records management (paper / electronic)
 - Other: ()
- **Assessment axes** (example)
 - **Likelihood of occurrence:** High / Medium / Low
(comprehensively judged from economic, organizational, technical, and ethical vulnerabilities)
 - **Impact:** High / Medium / Low
(judged from the three perspectives of food safety, social trust, and economic impact)
- **Priority determination** (example)
Based on the matrix of **vulnerability × impact**, determine the priority in three levels:
 - High Medium Low

Detailed procedures should follow the main body of the Handbook and/or internal procedures.

3.2 Summary of Assessment Results (to be completed)

No.	Scope	Specific example (item, process step, etc.)	Anticipated fraud type (e.g. substitution / false labeling, etc.)	Likelihood of occurrence (High / Medium / Low)	Impact (High / Medium / Low)	Overall evaluation (High / Medium / Low)
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1					
2					
3					
4					

Detailed evaluation should be managed separately in the “Food Fraud Vulnerability Assessment Sheet (VA Sheet).”

4. Control Policies (Countermeasures)

4.1 List of Control Policies (to be completed)

Item	Implementation policy (summary)	Responsible department	Supplementary notes (frequency, retention period, etc.)
① Control of raw materials and packaging materials	Example: Classify high-risk raw materials and packaging materials separately, and confirm receiving documents, specifications, country/region of origin, etc. Conduct additional verification when market prices fluctuate sharply.	(Example: Purchasing / Quality Assurance / Production)	Example: Authenticity verification at least once a year for high-risk items, records retained for ___ years
② Product labeling and label control	Example: Centrally control label text and artwork, and remove obsolete versions from the operational area. When revisions are made, confirm with at least two persons.	(Example: Quality Assurance / Product Development)	Example: Revision history control, obsolete-version segregation rules, periodic inspection of label shelves
③ Supplier and contractor control	Example: Contracts shall clearly state the prohibition of fraud, requirements for corrective action, and obligations to provide information, and audits and evaluations shall be conducted regularly.	(Example: Purchasing / Quality Assurance)	Example: Evaluation / audit at least once a year for new or high-risk suppliers
④ Testing, analysis, and result management	Example: Define the testing items and frequency for authenticity verification, and ensure prevention of tampering with analytical results (audit trails / double-checking).	(Example: Quality Assurance / Analytical function)	Example: Rules for correction of test records, log control, dual verification of results
⑤ Disposal and re-distribution control	Example: Clearly identify products for disposal, returned products, and obsolete materials, and retain evidence such as witness confirmation, records, and photographs at the time of disposal.	(Example: Production / Quality Assurance / General Affairs)	Example: Retention period for disposal records, measures to prevent re-distribution (locks, dedicated areas, etc.)
⑥ Records and information system control	Example: Standardize rules for correction of important records, access rights, audit trails, and backup procedures.	(Example: Information Systems / Quality Assurance)	Example: Monthly log review, periodic review of access rights
⑦ Internal reporting and culture building	Example: Establish a system and psychological safety that make it easy to report suspected Food Fraud, and clearly state protection for reporters.	(Example: Compliance / Human Resources, etc.)	Example: Review of number of reports and response status, sharing of cases

Delete unnecessary items and add or revise items according to the company’s circumstances.

5. Training and Exercises

5.1 Training Framework (to be completed)

Type	Target	Training content / Purpose (example)	Frequency (example)	Responsible party
Basic Training	All employees, part-time workers, temporary workers, etc.	Purpose, methods, and impact of Food Fraud, and the importance of reporting	Once a year / upon hiring	

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Job-Specific Training	Purchasing, Quality, and Production personnel	Company procedures, roles, reporting routes, decision-making procedures, and response when fraud is suspected	At least once a year	
Job-Specific Training	Managers and responsible personnel	Receipt of reports, initial decision-making, determination and follow-up of corrective and preventive actions	As necessary / once a year	
Practical Exercises	Related departments (Purchasing, Quality, etc.)	Exercises based on assumed scenarios covering “detect → report → isolate → investigate” (e.g. labeling errors, substitution of raw materials, etc.)	At least once a year	

Using actual Food Fraud and recall cases as training materials makes it easier for personnel to relate them to their own work.

6. Implementation, Verification, and Review

6.1 Implementation (Operation)

- For each countermeasure, clearly define:
 - who will do it,
 - what will be done,
 - how often, and
 - in what format,
 and incorporate it into routine operations.
- Retain inspection and verification results using checklists, logbooks, notebooks, etc.
- If sharp changes in purchase prices, specification changes, abnormal analytical values, or unusual supporting documents are identified, report and confirm them promptly.

Add your company's own rules as necessary:

→ ()

6.2 Verification

- **Verification methods** (tick as applicable)
 - Monthly confirmation by the responsible person
 - Internal audit
 - Second-party audit (group / business partner, etc.)
 - Review meeting (___ times per year)
 - Other: ()
- **Examples of verification items**
 - Whether countermeasures are being implemented as planned (frequency, existence of records, etc.)
 - Status of near misses, inconsistencies, complaints, reports, etc. related to Food Fraud
 - Whether there is any gap between the Vulnerability Assessment results and actual events, etc.

6.3 Review

The Vulnerability Assessment and this Plan shall be reviewed in the following cases:

- Periodic review ___ times per year (example: once a year as part of the Quality Management Review)
- When there are major changes in market conditions or the supply chain (e.g. sharp price increases, unstable supply, etc.)
- When new fraud cases, regulatory observations, or industry information become known
- When concerns become apparent through internal reports, whistleblowing, complaints, etc.

→ Enter your company's own rules:

()

7. Document and Record Control

7.1 Document Control

- **For this Plan**
 - Clearly record the revision date, revised content, reason for revision, and approver.
 - Manage the latest version in either paper or electronic form so that relevant personnel can access it

immediately.

- Where both group standards and site-specific appendices exist, clearly define the links between them.

7.2 Main Related Records (examples / add as necessary)

- Receiving documents, specifications, and authenticity verification records for raw materials and packaging materials
- Label approval records, artwork data, and revision histories
- Contracts, audit records, and evaluation records for suppliers / contract manufacturers
- Testing and analytical records, correction histories of results, and audit trails
- Disposal and re-distribution control records (disposal lists, witness records, photographs, etc.)
- Check results for important records (receipt, shipment, testing, etc.)
- Internal reports and consultation records (with anonymity protected to the extent necessary)

7.3 Retention Periods (guideline)

- Records relating to high-risk matters
(e.g. high-risk raw materials, major incident-related matters, etc.): _____ years
- Other related records: _____ years

Set and specify these in accordance with company standards, laws and regulations, and business partner requirements.

8. Appendices and Reference Information

- Appendix 1: Food Fraud Vulnerability Assessment Sheet (VA Sheet)
- Appendix 2: Food Fraud Mitigation Plan Checklist (for each department)
- Appendix 3: Training and Exercise Plan / Records (Forms YY, ZZ, etc.)
- Appendix 4: (as necessary) Site-Specific Appendices (list of high-risk items, list of substitute controls, etc.)
- Reference information section (optional)
Example: Future items for consideration
(DNA / isotope analysis, enhancement of electronic record systems, serialization, use of external databases, etc.)
→ ()

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