

Hazard Literacy Center

Hazard Literacy Education Program

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Is It Safe to Eat? A Health Check-up for Our Family Table



1. Program Overview

This disaster-education program is designed so that learners understand food-safety incidents not as simple hygiene problems or isolated events, but as a phenomenon in which risk and harm appear differently according to the production-distribution-consumption structure of food and socio-economic conditions. Noting in particular that, even when the same food is distributed, the risk each person faces varies with information access, language, economic circumstances, and level of label comprehension, it has learners diagnose and prescribe for their own table directly.

After learning the scientific principles by which food spoils and how to read labels and certification marks, learners "self-diagnose" the safety of their family table area by area, assign scores, and determine a diagnosis type. They then secure the evidence for a prescription using primary sources such as the Ministry of Food and Drug Safety's "Food Safety Korea," and write a "table-safety prescription" suited to their own home to share with their family. In this process, learners understand differences in access to food-safety information, examine the problem of equity in food safety from the perspective of disaster justice, and together seek the right to safe food and everyday practice.

Grade Level	Elementary, middle, and high school students	Instructional Methods	Lecture, case analysis, food-safety self-diagnosis, writing a tailored prescription, family sharing and discussion
Learning Environment	Regular classroom (a space that allows group work)	Duration	1100 minutes total (50 min × 2 sessions)
Required Materials	Activity sheets; writing tools; at least one smart device per group; clips from the documentary Food, Inc. (2008); news on the May 2025 North Chungcheong school-meal bread Salmonella food-poisoning incident; 2025 allergen non-labelling recall cases (MFDS); 2025 allergen non-labelling recall cases from the US FDA/FSIS; the Ministry of Food and Drug Safety's "Food Safety Korea" (foodsafetykorea.go.kr) access screen; various food label and certification-mark materials (HACCP, organic, antibiotic-free, GAP, halal, kosher, etc.); a self-diagnosis scoresheet and a table-safety prescription form; slides		

2. Learning Objectives (Hazards Literacy Framework)

① Understand and explain the causes and progression of food-safety incidents (production-distribution-consumption).

② Compare domestic and overseas cases of food-safety incidents to analyse how, even in the same incident, harm appears differently according to information access, language, and socio-economic conditions.

③ Self-diagnose and type the safety of one's family table, and write an "our-home tailored table-safety prescription" on the basis of primary sources such as "Food Safety Korea."

④ Understand differences in access to food-safety information from the perspective of disaster justice, and seek ways to act by sharing the diagnosis and prescription results with one's family.

Learning Objectives	Knowledge & Understanding		Reasoning & Skills					Values & Attitudes			Psychology & Emotion			Behavioral & Practical Enagement		
	A1	A2	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3	E1	E2	E3
Objective ①	O	O	O													
Objective ②		O		O	O											
Objective ③						O	O	O				O				
Objective ④							O		O	O				O		O

3. Key Concpets

· The production-distribution-consumption structure of food and the safety-risk factors at each stage

· The science of food spoilage (oxidation, decay, pH) and the principles of preservation

· Food-safety information (origin, use-by date, sell-by date, certification marks) and reading labels

· Food-safety self-diagnosis and tailored prescription (diagnosis → type → prescription → practice)

· The information gap and food-safety-vulnerable groups (multicultural families, older adults, low-income households)

· Disaster justice and equity in food safety

· The right to safe food and everyday practice at the family level

4. Program Sequence

Learning Activities	
Introduction	·Present news and cases of food-safety incidents, such as the 2025 school-meal bread Salmonella food poisoning, to spark interest. ·Pose the question: "Even with the same food, for whom does it become a greater risk?" ·Explain that learners will diagnose and prescribe for their own table directly.
Activity1	·Understand the causes of food-safety incidents (risks in production, processing, distribution, storage) and how they progress. ·Observe and confirm the scientific principles by which food spoils (oxidation, pH). ·Learn how to read labels and certification marks, equipping the "diagnostic tools." ·Make, area by area, the "table-risk checklist" to be used in the Session 2 self-diagnosis. ·Give a first score to your family table as it comes to mind now.
Activity2	·Self-diagnose and score the safety of your family table area by area, and determine a diagnosis type (Steps 1-2). ·Secure the evidence for a prescription using "Food Safety Korea" recall and sales-suspension information (Step 3).
Activity3	·Write an "our-home table-safety prescription" matched to the diagnosis result (Step 4). ·Share it with your family and exchange a word of encouragement (Step 5). ·Discuss differences in access to information from the perspective of disaster justice.
Wrap-up	·Understand the social and structural factors that influence food safety. ·Understand, from the perspective of disaster justice, that information-vulnerable groups should be protected first, and view food safety as a matter of rights and social systems rather than individual hygiene.

5. Theoretical Background and Activity Design for Disaster Education

Food-safety incidents arise from various causes-microbial contamination, chemical residues, allergen-labelling errors, expiry-date violations, and so on-and risk can occur at any stage of production, processing, distribution, or consumption. In Korea too, school-meal food poisoning recurs; in May 2025 there was a large-scale meal-bread Salmonella incident in which 197 symptomatic cases and 48 confirmed cases arose across seven meal facilities in Cheongju and Jincheon, North Chungcheong. Because Salmonella of the same genotype was detected in patients and in the food, the MFDS ordered a sales halt and recall of the roll cake and other items identified as the causative foods. As this shows, an integrated approach that manages hazards across the whole process "from farm to fork" has been emphasised in the food-safety field (World Health Organization, 2022).

Food-safety risk, however, does not reach every consumer equally. Food labelling, certification, and recall information is disclosed, but whether one can actually understand and use it varies with information access, language, digital literacy, and economic circumstances. Recalls due to unlabelled allergens, for example, occur commonly at home and abroad; in 2025 the MFDS recalled imported snacks with missing milk labelling, and the US FDA and FSIS likewise recalled many products for failing to label allergens such as milk and wheat. In such cases, multicultural families and migrants who cannot immediately understand Korean or English labels, older adults who have difficulty accessing recall notices, and low-income households without the means to choose safe alternative foods are exposed to greater risk from the same information (World Health Organization, 2015). Such differences can be interpreted through the perspective of disaster justice, which applies to the food-safety context a framework of social justice encompassing distributive, procedural, and interactional justice (Lukasiewicz & Baldwin, 2017).

To bring food-safety threats from "a distant event" into "the everyday of my table," this program applies a "self-diagnosis-prescription" method borrowed from health check-ups. It comprises two stages: ① Session 1 (analysis of Food, Inc. (2008) and the 2025 meal Salmonella and allergen non-labelling recall cases, and equipping cognition and diagnostic tools through the science of spoilage and the study of labels and certification) and ② Session 2 ("our family table health check-up"), and Session 2 proceeds through five steps: table-safety self-diagnosis-determining the diagnosis type-Food Safety Korea cross-check (evidence for the prescription)-tailored table-safety prescription-family sharing and encouragement. Learners check and score their own table, issue an actionable prescription grounded in primary sources, and, in the process of sharing the result with their family, understand that food safety is a matter of rights and equity beyond individual hygiene.

6. Instructional Considerations

- Make clear that the self-diagnosis is not an evaluation in which "a low-scoring household is bad," but a tool for finding points to improve together. Place the weight on the prescription and practice rather than on the score.
- In the home food survey and diagnosis, take care that students do not judge their family's consumption patterns as "wrong." Guide them to consider together the conditions the family faces, such as economic circumstances, a multicultural or linguistic environment, and time and access.
- Avoid reducing the cause of food-safety incidents to a single factor such as "a particular company's fault" or "the carelessness of individual consumers," and guide learners to understand that various factors-production, distribution, and management systems, and information-disclosure institutions-operate together.
- When dealing with a meal food-poisoning incident that caused real harm to life and health, take care that it does not drift into blame or stigma toward a particular school, region, or company, and guide learners to interpret the cause and countermeasures on the basis of verified primary sources (MFDS announcements, Food Safety Korea).
- When sharing the prescription with the family, guide students to convey it in an attitude of "information-sharing and encouragement" rather than blame, so that the activity leads to cooperation rather than conflict within the home.
- Use only the minimum length of documentary video (e.g., Food, Inc.) necessary for instructional purposes, and comply with the relevant laws and the school's copyright-use guidelines.
- Guide learners to recognise the food-safety information gap as a problem of social structure from the perspective of disaster justice, and to understand that protecting information-vulnerable groups is a fair response.

7. References

- Lukasiewicz, A., & Baldwin, C. (2017). Voice, power, and history: Ensuring social justice for all stakeholders in water decision-making. Local Environment, 22(9), 1042-1060. https://doi.org/10.1080/13549839.2014.942261
- World Health Organization. (2015). WHO estimates of the global burden of foodborne diseases: Foodborne disease burden epidemiology reference group 2007-2015. World Health Organization.
- World Health Organization. (2022). WHO global strategy for food safety 2022-2030: Towards stronger food safety systems and global cooperation. World Health Organization.

Session 1: The Dinner-Table Detective Gathers the Diagnostic Tools



Topic	Why food spoils, and how to read a label
What will we learn?	① Understand the causes of food-safety incidents and the science of spoilage. ② Learn how to read labels and certification marks, and create a 'dinner-table risk checklist' for self-diagnosis.

1 Tracing Our Table Backwards

- After watching the documentary Food, Inc. (2008) and the 2025 school-lunch Salmonella food-poisoning case, trace one food you ate yesterday backwards along its path from 'farm → table.'

2 The Science of Spoilage — Seeing Oxidation and pH

- Observe apple browning and milk spoilage, or check them using provided materials. ① A cut apple turns brown by reacting with what (oxidation)? Give one way to prevent it. ② Explain, in terms of acids and bases, why spoiled and fresh milk have different pH.

3 How to Read Labels and Certifications — Mastering the Diagnostic Tools

- Look at real food labels and note which items you must check to judge safety, and why.

Item to check	What to look for, and why
Sell-by / use-by date	
Country of origin	
Certification marks (HACCP, etc.)	
Allergen labeling	

4 Building the Dinner-Table Risk Checklist

- Write one check question per area for the 'our family's table' self-diagnosis you will use in Session 2.

Area	Our home check question (written by me)
Storage & expiration dates	
Checking labels & markings	
Dietary variety	
Using information (recalls & certifications)	

5 My Initial Self-Diagnosis Score

Using the checklist above, give your family's table a first score based on your current impression (out of 10). (This leads into the detailed diagnosis and prescription in Session 2.)

Our table's initial score: ( ) / 10 — reason for this score

Session 2: A Health Check-Up for Our Family Table

Topic	Self-diagnosis → Type assessment → Tailored prescription → Sharing with family
What will we learn?	① Self-diagnose and classify our family table's safety, and gather evidence for a prescription from primary sources. ② Write a tailored table-safety prescription for our home and share it with the family.

1 Table-Safety Self-Diagnosis — Scoring by Area

- Diagnose your family's table habits area by area. Give 3 points if you do it well, 2 if sometimes, 1 if rarely.

Diagnostic item	Score (1–3)	Notes
We check and follow expiration dates and storage methods		
We check labels, origin, and certification marks when buying		
We eat a balanced, varied diet (not one-sided)		
We know how to look up recall and safety information		
We consider family members with allergies or special needs		
Total	/ 15	

2 Determining the Diagnosis Type

- Based on your scores, mark which end of each axis your family table is closer to (circle one of the two).

Indifferent-to-information type	↔	Label-checking type
Price-first type	↔	Safety-first type
One-sided type (same foods only)	↔	Varied type (balanced)

One biggest 'strength' and one 'weakness' of our family table

3 Cross-Checking with 'Food Safety Korea' — Evidence for the Prescription

- Using a smart device, go to the Ministry of Food and Drug Safety's 'Food Safety Korea' (foodsafetykorea.go.kr) and search recall and sales-suspension records for foods your family often eats (or the same category).

Search keyword	Number of results	Summary of the most recent case	Applies to our home (○/△/×)

4 A Tailored ‘Table-Safety Prescription’ for Our Home

- Turn the weaknesses revealed in the diagnosis into practical prescriptions. Like an exercise prescription, ‘what’ and ‘how often’ must be clear.

■ Diagnosis

Category	Content
Our home’s diagnosis type	
Weakest area	

■ Prescription

Prescription (behavior to change)	Specific method & evidence (Food Safety Korea, etc.)	Frequency & when

5 Sharing with Family + Encouragement

Show the prescription to your family and invite them to practice it together — but frame it as ‘sharing information and encouragement,’ not blame.

① A word for your family (encouraging them to follow the prescription) ② What our society can do for the table safety of neighbors who find it hard to read Korean labels and recall notices (from a disaster-justice perspective)