FY2009 General Food Policy Bureau of Ministry of Agriculture, Forestry and Fisheries Project Overseas Business Support Project for Japanese Food Industry in East Asian

Investigation of Commodity Food Standards and Analytical Methods in Asia

International Cooperation Committee, ILSI Japan Hiroaki Hamano

List of publicly solicited FY2009 projects

aided by General Food Policy Bureau of Ministry of Agriculture, Forestry and Fisheries

- 1 Corporation system enhancement for food and agriculture
- 2 Information dissemination services improvement for the food industry
- 3 Supporting for advancing cooperating function for food and agriculture
- 4 Promoting for further utilization of functionality of farm and marine products
- 5 Supporting for brand building of regional food and its management
- 6 Survey on structure of the food industry
- 7 Technological measures for promoting cooperation between food and agriculture
- 8 Supporting for improvement of capability for technological development of the food industry in rural area
- 9 Building up business with cooperation of food-service industry and agriculture
- 10 Promoting for maintenance of business continuity plan in the food industry
- 11 Promoting for dissemination of HACCO in the food industry
- 12 Promoting for labeling in the food industry
- 13 Promoting for measures to secure the confidence against food companies
- 14 Promoting CO2-reduction measures in the food industry
- 15 Promoting for restrictions to generate food industrial waste
- 16 Demonstration of economical processing system for recyclable food waste
- 17 Promoting for smooth implementation of Containers/Packaging Recycling Act
- 18 Study on recycling system for biomass plastic containers/packaging
- 19 Experiments for utilizing biomass in the food-service industry
- 20 Overseas Business Support for Japanese Food Industry in East Asia
- 21 Promoting for establishment of foundation for effective food distribution system
- 22 Promoting for advancing food retailing function
- 23 Demonstration and dissemination of business model using new technology
- 24 Supporting for establishment of regional distribution model
- 25 Cost-reduction for food retailing and structure improvement for functional enhancement
- 26 Promoting high-value added model of food distribution
- 27 Demand development for new processed rice products
- 28 Promoting for popularizing excellent Japanese restaurants abroad
- 29 Considering measures to encourage intake of staple food, which is a part of the projects for promoting "Nippon Shokuiku"

20. Overseas Business Support Project for Japanese Food Industry in East Asia

[Point of Measures]:

To support business activities of Japanese food industry in East Asia (the Republic of Korea, the People's Republic of China, ASEAN countries and India) to strengthen its international competitiveness in East Asia.

[Policy target]:

To increase scale of business activities of overseas subsidiaries of Japanese food companies in East Asia by 30% to 50% over five years.

Sales target : Approximately \$8.4 billion (based on FY 2005) \rightarrow \$11~12.5 billion (FY 2010)

20. Overseas Business Support Project for Japanese Food Industry in East Asia

[Purpose of the Project]

In order to strengthen management practice and international competitiveness of Japanese food industry facing quantitative saturation and maturity in domestic market, this project aims to support efforts of the industry to promote developing business activities in East Asian regions where attractive market is forming due to increasing population and dynamically growing economy

[Description of the Project]

To contribute to the promotion of smooth business within East Asian regions by conducting an investigation on possible integration of food standards and methods of analysis, and organizing a workshop with experts from s countries concerned

Overseas Business Support Project for Japanese Food Industry in East Asia

[Name of the Task]

Investigation of Commodity Food Standards and Analytical Methods in Asia

[Summary of the Investigation]

In order to expand distribution of food ingredients and food products in East Asian regions, we investigated the commodity food standards on major food categories and methods of analysis in East Asian countries. Based on the results, we extracted their differences and points to be considered for their future integration or harmonization.

[Countries surveyed]

In the light of marketability (including population), business activities of Japanese companies possessing overseas subsidiaries and market potential in East Asian countries, the investigation covered the Republic of Korea, the People's Republic of China, Malaysia, Singapore, the Philippines, Indonesia, Thailand, and Vietnam (8 countries).

Overseas Business Support Project for Japanese Food Industry in East Asia

[Foods Investigated]:

When designing the investigation program, the first pilot formats covered instant noodles, carbonated soft drinks, prepared frozen foods and food additives.

[Method of Investigation]

The investigation program was designed by specified International Life Sciences Institute (ILSI Japan). It was conducted with cooperation of ILSI's international network, namely ILSI branches in Korea, China and Southeast Asian regions (ASEAN countries).

[Project Team]

ILSI Japan set up the project team in its "International Cooperation Committee".

The program design and selection of foods investigated were finally adjusted in cooperation with ILSI branches (in Korea, China and Southeast Asian countries).

Overseas Business Support Project for Japanese Food Industry in East Asia

[Total Budget]: ¥ 8,370,000

[Project Schedule]: Preliminary Investigation and designing: From June to August in 2009 Filling in the Investigation Forms: From September to December in 2009 Collection and Analyzing the Data, and extraction of the points to be considered: From January to February in 2010 Workshop:

In Tokyo, on Monday afternoon in March 29, 2010 Preparation of the Report: March 31, 2010

Overseas Business Support Project for Japanese Food Industry in East Asia

[International Cooperation Committee]:

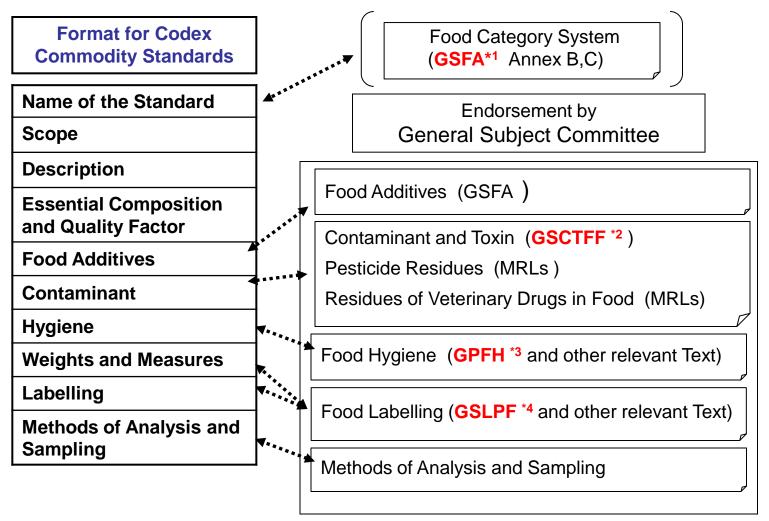
- Keiichi Abe (Cerebos Pacific Ltd.)
- Hiromi Ohta (Suntory Wellness Limited)
- Yoko Ogiwara (Ajinomoto Co., INC.)
- Kiyohisa Kaneko (Coca-Cola (Japan) Company, Limited)
- Masanori Koumura (Ajinomoto Co., INC. ASEAN Regional HQs)
- Yukio Suzuki (Schiff's Japan)
- Fumiko Sekiya (Takasago International Corporation)
- Tomoko Takahashi (Nestle Japan Ltd.)
- Koji Furuse (Unilever Japan Beverage)
- Shuji Iwata (ILSI Japan)
- Kazuo Sueki (ILSI Japan)
- Hiroaki Hamano (ILSI Japan)

ILSI Japan/MAFF Project Investigation of Commodity Food Standard and Analytical Methods in Asia

Investigation Forms: Japan

Elaboration of Codex Commodity Standards

Procedural Manual : Section III Elaboration of Codex Standards and Related Text



- *1 Codex Stan 192-1955 General Standard for Food Additives
- *2 Codex Stan 193-1995 General Standard for Contaminants and Toxins in Foods and Feeds
- *3 CAC/RCP1-1969 General Principles of Food Hygiene
- *4 Codex Stan 1-1985 General Standards for the Labelling of Prepackaged Foods

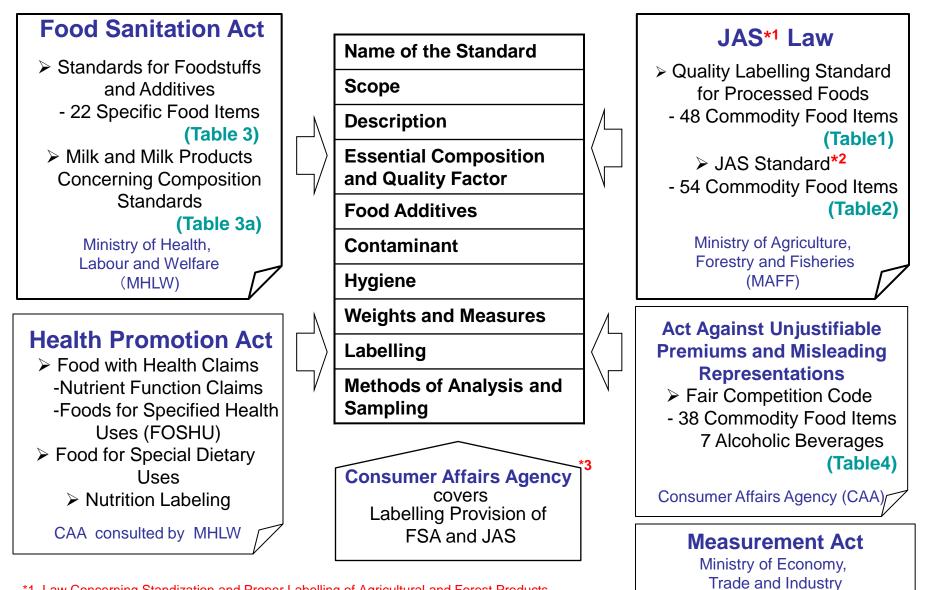
Codex Standards (Commodity Standards)

Stan No	Title	Year of Adoption
1	General Standard for the Labelling of Prepackaged Foods	1985
3	Standard for Canned Salmon	1981
12	Standard for Honey	1981
13	Standard for Preserved Tomatoes	1981
17	Standard for Canned Applesauce	1981
19	Standard for Edible Fats and Oils not Covered by Individual Standards	1981
33	Standard for Olive Oils and Olive Pomace Oils	1981
36	Standard for Quick Frozen Finfish, Eviscerated or Uneviscerated	1981
37	Standard for Canned Shrimps or Prawns	1981
38	Standard for Edible Fungi and Fungus Products	1981
39	Standard for Dried Edible Fungi	1981

293	Standard for Tomatoes	2008
296	Standard for Jams, Jellies and Marmalades	2009
297	Standard for Certain Canned Vegetables	2009

200 Items (2009) (http://www.codexalimentarius.net)

Japanese Commodity Standards



*1 Law Concerning Standization and Proper Labelling of Agricultural and Forest Products

*2 voluntary (other than organic foods) standard with the certification system to attach the JAS Mark

*3 New governmental organization started in September 2009

General Quality Labeling Standards

- Quality Labeling Standards for Fresh Foods
- > Quality Labeling Standards for Processed Foods
- > Quality Labeling Standards for Genetically Modified Foods

Table1 List of Quality Labeling Standards for each commodity items

2009.9

	Canned and Bottled products	15	Chilled meat ball	
1 Canned and bottled agricultural products		16	Fish ham, Fish sausage	
2	Canned and bottled livestock products	17	Specially packed steamed fish paste	
3	Canned and bottled prepared foods	18	Flavored steamed fish paste	
	Beverages		Cereal Products	
4	Fruits juice and fruit beverages	19	Dried noodles	
5	Carbonated drinks (Case Study 2)	20	Instant Noodle (Case Study 1)	
6	6 Soy milks		Macaroni products	
7	7 Carrot juice, Mixed carrot juice		Kori Dofu (dried frozen soy curd)	
Livestock and Fish Paste		23	Breads	
8	Bacons	Agricultural and Forestry Products		
9	Hams	24	Pickled agricultural products	
10	Pressed ham	25	Processes tomato potato	
11	11 Mixed pressed ham		Jams	
12	12 Sausage		Dried shiitake mushroom	
13 Mixed sausage		Marine Products		
14	Chilled hamburg stake	28 Processed <i>Uni</i> (sea urchin)		

Table 1 cont.

29	<i>Uni – Aemono</i> (mixture of sea urchin eggs and marine products)		Oil and Fat		
30	Dried Wakame (undaria pinnatifida)	43	Edible vegetable oils and fats		
31	Salted Wakame	44	Margarine		
32	Kezuribushi (shaved dried fish)		Other		
33	Boiled and dried fishes	45	Retortable pouched food		
34	Processed eel	46 Frozen vegetable product			
	Seasoning		Chilled Gyoza		
35	Dressing and dressing type seasonings	48	Prepared frozen food (Case Study 3)		
36	Edible vinegar				
37	Flavored seasonings				
38	Dehydrated soup				
39	Worcester sauces				
40	Shoyu (soy sauce)				
41	<i>Miso</i> (soy bean paste)				
42	<i>Tuyu</i> (Dipping soup) for noodles				

Table 2

	General JAS				
	Canned and Bottled Products	Processed agricultural products			
1	anned and bottled agricultural products 22 Pickled agricultural products				
2	Canned and bottled livestock products	23	Processed tomato products		
3	Canned and bottled marine products	24	Jams		
	Beverages		Processed marine Products		
4	Fruits juice and fruit beverages	25	Kezuribushi (shaved dried fish)		
5	Apple straight pure juice	26	Boiled and dried fishes		
6	Carbonated drinks (Case Study 2)		Sugars		
7	Soy milks	27	Glucose		
8 Carrot juice, Mixed carrot juice		28	High fructose corn syrup and sugar added high fructose corn syrup		
	Livestock products	Seasoning			
9	Bacons	29	Dressings		
10	Hams	30 Fermented vinegar			
11	Pressed ham	31 Flavored seasonings			
12	Sausage	32	Dehydrated soup		
13	Mixed sausage	33	Worcester sauces		
14	Hamburger patty	34	Shoyu (soy sauce)		
15	Chilled ham burg stake		Oil and Fat		
16	Chilled meat ball	35	Edible vegetable oils and fats		
	Cereal Products	36	Refined lard		
17	Dried noodles	37 Margarines			
18	Instant noodles (Case Study 1)	38 Shortening			
19	Macaroni products	39	39 Edible refined and processed oils and fats		
20	Vegetable protein	Others			
21	Bread crumbs	40Prepared frozen food(Case Study 3)			

Table 2 cont.

	Specific JAS with production methods			
41	Matured Hams			
42	Matured Sausage			
43	Handmade dried noodles			
44	Naturally Grown Chicken			
	Organic JAS			
45	Organic agricultural products			
46	Organic processed foods			
47	Organic feeds			
48	Organic livestock products			
	□ JAS with production information			
49	Beef with the disclosed production information			
50	Pork with the disclosed production information			
51	Agricultural products with the disclosed production information			
52	Processed foods with the disclosed production information			
53	Farmed fishes with the disclosed production information			
	JAS with controlled constant temperature distribution			
54	Processed foods with controlled constant temperature distribution			

List of Specific Food Items in Standard for Foodstuffs and Additives

under Food Sanitation Act

2000 0

		under Food Sanitation Act 2009.9	
Soft Drink Beverages (Case Study 2)	12	Boiled Octopus	
Powdered Soft Drink Beverages	13	Boiled Crab	
Crushed Ice	14	Fresh Fish and Shellfish to be Eaten Raw	
Frozen Confections	15	Oysters to be Eaten Raw	
Meats and Whale Meat (with the exemption	16	Agar	
of hozen whate meat eaten raw)			
Edible Birds' Eggs	17	7 Grains, Beans and Vegetables	
Blood, Blood Corpuscles and Blood Plasma	18	Bean Jam or Further Processing	
Meat Products	19	Soybean Curd ("tofu")	
Whale Meat Products	20	Instant Noodles (Case Study 1)	
Fish-paste Products	21	Frozen Foods (Case Study 3)	
Salmon Roe and Cod Roe (defined as the ovaries of walleye or pollack preserved in salt; hereinafter the same in this section	22	2 Food Packed in Containers and Sterilized by Pressurization and Heating	
· · ·	Soft Drink Beverages(Case Study 2)Powdered Soft Drink BeveragesCrushed IceFrozen ConfectionsMeats and Whale Meat (with the exemption of frozen whale meat eaten raw)Edible Birds' EggsBlood, Blood Corpuscles and Blood PlasmaMeat ProductsWhale Meat ProductsFish-paste ProductsSalmon Roe and Cod Roe (defined as the ovaries of walleye or pollack preserved in	Soft Drink Beverages(Case Study 2)12Powdered Soft Drink Beverages13Crushed Ice14Frozen Confections15Meats and Whale Meat (with the exemption of frozen whale meat eaten raw)16Edible Birds' Eggs17Blood, Blood Corpuscles and Blood Plasma18Meat Products19Whale Meat Products20Fish-paste Products21Salmon Roe and Cod Roe (defined as the ovaries of walleye or pollack preserved in22	

Note: These standards are composed of 'Standard for Component', 'Standard for Production', 'Standard for Storage'

1.Details of Food Additives are available in English http://www.mhlw.go.jp/english/topics/foodsafety/foodadditives/index.html

Tahlo 3

2.Details of Agricultural Chemical Residues are available in English http://www.mhlw.go.jp/english/topics/foodsafety/positivelist060228/index.html

Milk and Milk Products Concerning Composition Standards

Table 3 a

Raw Milk		9	Concentrated milk
Α	Raw milk	10	Concentrated skimmed milk
В	Raw goat's milk	11	Evaporated milk
Dr	inking Liquid Milks and Milk drinks	12	Evaporated skimmed milk
1	Cow's milk	13	Sweetened condensed milk
2	Special cow's milk	14	Sweetened condensed skimmed milk
3	Pasteurized goat's milk	15	Whole milk powder
4	Composition-controlled cow's milk	16	Skimmed milk powder
5	Low fat cow's milk	17	Cream powder
6	Nonfat cow's milk	18	Whey powder
7	Processed milk	19	Whey powder protein concentrated
	Milk Products	20	Buttermilk powder
1	Cream	21	Sweetened milk powder
2	Butter	22	Formulated milk powder
3	Butter oil	23	Fermented milk
4	Processed cheese	24	Lactic acid bacteria drinks(nonfat milk
			solid not less than 3.0%)
5	Concentrated whey	25	Milk drinks
6	Ice cream		Foods main ingredients are Milk
7	Ice milk	1	Lactic acid bacteria drinks(nonfat milk
			solid less than 3.0%)
8	Lacto ice		

Table 4 List of Fair Competition Code for Food Items

2009.9

Milk and milk products		19	Instant noodles		
1	Drinking milk	20	Miso (soy bean paste)		
2	2 Fermented milk, Lactic acid bacteria beverage		Confectionary		
3	Pasteurized lactic acid bacteria beverage	21	Biscuits		
4	Natural cheese, Processed cheese, Cheese food	22	Chocolates		
5	Ice creams	23	Food using chocolate		
	Honeys	24	Chewing gum		
6	Honeys	25	Souvenir for tourist		
7	Royal jelly		Seasoning		
	Processed marine Products	26	Edible vinegar		
8	<i>Uni</i> (sea urchin) foods	27	Synthetic lemon juice		
9	Karashi Mentaiko (spicy marinated roe of pollack)	28	Margarines		
10	Kezuribushi (shaved dried fish)	29	Dressings		
11	Nori (laver)	30	Shoyu (soy sauce)		
	Processed agricultural products	31	Table salt		
12	Canned foods	Beverages			
13	Processed tomato	32	Fruit drinks		
14	Powdered Wasabi (Japanese horseradish)	33	Coffee drinks		
15	Raw noodles	34	Regular coffee, instant coffee		
16	Kori-dofu (dried frozen soy curd)	35	Moromi-su (vinegar drink from residue of rice brandy)		
17	Soy milks		Processed livestock		
18	Packed bread	36	Ham, sausage		

Table 4 cont.

Alcoholic Beverages				
37	Beer			
38	Imported beer			
39	Whisky			
40	Imported whisky			
41	Shochu (spirits by single distillation)			
42	Awamori (rice brandy)			
43	Retailer liquor shop			
	Fresh foods			
44	Meat			
45	Egg			

Food Category System (GSFA Annex B)

06.4 Pasta and noodles and like products
06.4.1 Fresh pastas and noodles and like products
06.4.2 Dried pastas and noodles and like products
06.4.3 Pre-cooked pastas and noodles and like products

Case Study 1 : Instant Noodle

JAPAN

Standard	Codex	Food Sanitation Act	JAS Law		
Item	Commodity Standard	Standard for specific Items	Quality Labelling Standard	JAS Standard	
Name of the Standard	Instant Noodles CODEX STAN 249-2006	Instant Noodles	Instant Noodles	Instant Noodles	
Scope	-ready for consumption after dehydration process	Fried noodles	• include raw type		
Description	Fried noodles, Non-fried noodles				
Essential Composition and Quality Factor	 3.1 Composition 3.1.1 Essential Ingredients 3.1.2 Optional Ingredients 3.2 Quality Criteria 3.2.1 Organoleptic 3.2.2 Foreign Matter 3.2.3 Analytical Requirement for Noodle Block (a) Moisture Content maximum : fried 10% non-fried 14% (b) Acid value maximum 2mg KOH/g oil 	 Acid value not more than 3 mg KOH/g oil Peroxide value not more than 30 meq/kg 	 Wheat flower and/or buckwheat flower as the main ingredients Add salt or lye water 	 Moisture not more than 14.5% (non-fried) Acid value not more than 1.5 mg KOH/g oil pH 3.8-4.8 (non-fried) 	

* This Table does not contain details of standards regulated for all foodstuffs such as;

Quality Labelling Standard for Processed Foods under JAS Law

General Compositional Standard for Food; General Food Production Processing and Preparation Standards; General Food Storage Standards
 under Food Sanitation Act

Case Study 1 cont.

Standard	Codex	Food Sanitation Act	JAS Law	
Item	Commodity Standard	Standard for specific Items	Quality Labelling Standard	JAS Standard
Food Additives	MRLs of GSFA			 Positive List (limited use)
Contaminant	MRLs of GSCTFF			
Hygiene	 Containers or Packing Condition 7.1 General Principle of Food Hygiene and other relevant Codex Text 7.2 Principle for the establishment and application of Microbiological Criteria for Foods 	 Storage Standard 		 Container and Packing Condition
Weights and Measures				
Labelling	8.1 Name of the Food 8.2 Labelling for "HALAL"		 Specific Labeling Methods 	● JAS Mark
Methods of Analysis and Sampling	 9.1 Sampling 9.2 Determination of Moisture 9.3 Extraction of Oil from Instant Noodle 9.4 Determination of Acid Value 	 Acid value Peroxide value 		 Moisture Acid value pH

Case Study 2	Food Sanitation Act	JAS	Law	
cont.	Standard for Specific Items	Quality Labelling Std.	JAS Std.	
JAPAN	<u>Soft Drink Beverages</u> (covers 14.1non- alcoholic ("soft") beverages)	Fruits Juice and fruit beverages	Fruits Juice add fruit beverages	
Name of the Standard	Non-alcoholic (less than 1% alcohol) beverages, excluding lactic acid bacterial drinks, milk and milk drinks	<u>Carbonated soft</u> <u>drinks</u>	Carbonated soft drinks	
Scope		Soy milks	Soy milks	
Description	 Must not be turbid (with some exception) Must not contain any sediment or any solid foreign matter (with some exception) 	Carrot juice, mixed carrot juice	Carrot juice, mixed carrot juice	
Essential Composition and Quality Factor	 Must not contain detectable levels of arsenic, lead or cadmium. The tin content must not exceed 150.0 ppm 		Apple straight pure juice	
Food Additives	 Tests for coliform bacilli must be negative Mineral water with a carbon dioxide pressure 	*Each standard has it's own Scope, Description and other Items		
Contaminant	inside of the container of not more than 98 kPa at 20 degree in Celsius , and that has not			
Hygiene	been sterilized or disinfected, must test negative for enterococci or green pus bacilli			
Weights and Measures	• For beverages made for solely apple juices and/or juiced fruit, the patulin content must not			
Labelling	exceed 0.050 ppm			
Methods of Analysis and Sampling	 Production Standards, Package Standards Storage Standards 			
	 Tests for arsenic, lead, cadmium, tin, patulin, coliform bacilli, enterococci or green pus bacilli Tests for water used as raw material Standards and testing methods for implements, containers and packaging 			

Carbonated Soft Drinks (JAS Law)





Quality Labeling Std. Carbonated Soft Drinks	JAS Standard
Carbonated Soft Drinks	
	Carbonated Soft Drinks
Quality labeling for carbonated soft drinks	Standard for carbonated soft drinks
Water–based flavored drinks with added carbon dioxide, sweetener, acidulant and others	Water–based flavored drinks with added carbon dioxide, sweetener, acidulant and others
	 Must have satisfactory tone of color Must have refreshing flavor without off-taste and off-odor Must not be turbid (with some exception) Must carbon dioxide be dissolved well and have fine bubbles sustainably No foreign matters
	 Preservative: only sodium benzoate and p- hydroxybenzoic acid allowed to use Antioxidant: only L-ascorbic acid and sodium L-ascorbate allowed to use Emulsifier: only sucrose fatty acid ester and glycerin fatty acid ester allowed to use
	Specification on Gas volume
	Must meet designated volume appeared on the label
Specific labelling methods	JAS mark
This Table does not contain details of standards regulated for	all foodstuffs
	Water-based flavored drinks with added carbon dioxide, sweetener, acidulant and others

Case Study 3 : Prepared Frozen Foods

JAPAN		JAS Quality Labelling Standard Prepared Frozen Foods				
Name of the Standard		Frozen fried foods	Frozen fried Fishes Frozen fried Shrimp Frozen fried Squids	os	Product names are defined by main material content ,	
Scope	$ \longrightarrow $		Frozen fried Oyster Frozen Croquettes	s	limitation of alternative material, etc.	
Description			Frozen <i>Katuretu</i> (fr	ied meat)		
Essential Composition and		Frozen <i>Shaomai,</i> Frozen <i>Gyoza,</i> Frozen <i>Harumaki</i> (spring rolls) Frozen Hamburger steaks, Frozen Meatballs, Frozen Fish hamburgers, Frozen Fishballs				
Quality Factor						
Food Additives		Frozen Steamed Rice, Frozen Noodles				
Contaminant	>	Standard for Foodstuff (Food Sanitation Act)				
Hygiene		Frozen Foods				
Weights and Measures			r Components onsumed)	Bacterial count	Coliform group	
Labelling		without heating		100,000/g>	Test negative	
Methods of Analysis and Sampling		after heating (heated before freezing)		100,000/g>	Test negative	
	l	After heating (other than 2 above)	3,000,000/g	J> Test negative	
		Storage Standard must be below -15°C				

Example within Codex

Food Category System : 09.2.2: Frozen battered fish, fish fillets and fish products, including molluscs, crustanceans, and echinoderms

Codex Stan: 166-1989 Quick frozen fish sticks(fish fingers), fish portions and fish fillets-breaded or in batter

F2010 Overseas Business Support Project for Japanese Food Industry in East Asia

Investigation of Commodity Food Standards and Analytical Methods in Asia

• Expansion of Countries to Investigate

- Expansion of Food Categories to Investigate
 - Development of the Database
 - Call for New Participants to the Project