

(Unofficial)

Notification of the Ministry of Public Health

(No.364) B.E.2556 (2013)

Re: Standards for Pathogenic Microorganisms in Food

It deems appropriate to amend the Notification of the Ministry of Public Health, Re: Standards for Pathogenic Microorganisms in Food

By the virtue of provisions of Section 5 and 6(2) and (3) of the Food Act B.E.2522 (1979), in which contain provisions in relation to the restriction of Rights and Liberties of the Persons, in respect of which Section 29 and in conjunction with Section 33, Section 41, Section 43 and Section 45 of the constitution of the Kingdom of Thailand so permit by virtue of provisions of law; the Minister of Public Health hereby issues the notification as follows:

Clause 1. The Notification of the Ministry of Public Health Re: Standards for Pathogenic Microorganisms in Food , dated 10th February B.E. 2552 (2009) shall be repealed.

Clause 2. Food listed in Annex 1 of this Notification shall be free from pathogenic microorganisms except for pathogenic microorganisms specified in Annex 2 and 3 of this Notification.

Clause 3. This Notification shall not be enforced to health supplement products, food additives and other food which have specific requirements for pathogenic microorganisms.

Clause 4. This notification shall come into force from the day following date of its publication in the Government Gazette.

Notified on 25th September B.E. 2556 (2013)

(Signed) Pradit Sinthawanarong
(Mr. Pradit Sinthawanarong)

Minister of Public Health

(Published in the Government Gazette Vol. 130, Special Part 148 Ngor, dated 31st October 2013.)

Note: This English version of the notification is translated to meet the need of the non-Thai speaking people. In case of any discrepancy between the Thai original and the English translation, the former will take priority.

Annex 1

List of food products followed the Notification of the Ministry of Public Health Attachment to the Notification of the Ministry of Public Health (No. 364) B.E. 2556 (2013)

Re: Pathogenic Microorganisms in Foods

1. Modified Milk for Infants and Follow-up Formula Modified Milk for Infants and Young Children
2. Infant Foods and Follow-up Formula Food for Infant and Young Children
3. Supplementary Foods for Infant and Young Children
4. Cow's Milk
5. Flavoured Milk
6. Other Milk Products
7. Cheese
8. Cream
9. Ice Cream
10. Beverages in Sealed Containers
11. Drinking Water in Sealed Containers
12. Ice
13. Chocolates
14. Weight-control Foods
15. Foods in Sealed Containers
16. Semi-processed Foods
17. Some Particular Kinds of Sauces
18. Food Seasonings derived from the Hydrolysis or Fermentation of Soy Bean Protein
19. Alkaline-preserved Eggs
20. Fermented Milk
21. Electrolyte Drinks
22. Tea
23. Coffee
24. Soybean Milk in Sealed Containers
25. Natural Mineral Water
26. Butter Oil
27. Margarine, Blends, Fat spreads, and Blended fat spreads
28. Honey
29. Jam, Jelly, and Marmalade in Sealed Containers
30. Ghee
31. Butter
32. Herbal Tea
33. Processed Gelatin and Jelly Desserts
34. Sauces in Sealed Containers
35. Bread
36. Husked Rice Flour
37. Fortified Rice with Vitamins.
38. Ready-to-Cook foods and Ready-to-Eat foods

Annex 2

Requirement on Pathogenic Microorganisms in Foods

Attachment to the Notification of the Ministry of Public Health (No. 364) B.E. 2556 (2013)

Re: Pathogenic Microorganisms in Foods

Food product	Type of pathogen	Requirement
1. Modified Milk for Infants (powder or dried) 2. Infant Foods (powder or dried)	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
	4. <i>Cronobacter sakazakii</i>	Shall not be detected in 10 g
3. Follow-up Formula Modified Milk for Infants and Young Children (powder or dried) 4. Follow-up Formula Food for Infant and Young Children (powder or dried)	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
5. Supplementary Foods for Infant and Young Children (powder or dried)	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g
6. Ready-to-drink milk passed through the heat treatment process by Pasteurization		
(6.1) Cow's Milk	1. <i>Salmonella</i> spp.	Shall not be detected in 25 ml
(6.2) Flavoured Milk	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 ml
(6.3) Other Milk Products	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/ml
(6.4) Other Milk Products beside cow's milk	4. <i>Listeria monocytogenes</i>	Shall not be detected in 25 ml
7. Powder Milk 8. Flavoured Milk (dry) 9. Other Milk Products (dry)	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
10. Cheese		
(10.1) $a_w \geq 0.9$	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g
	5. <i>Listeria monocytogenes</i>	Shall not be detected in 25 g

Food product	Type of pathogen	Requirement
(10.2) a_w between 0.82-0.9	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 500 cfu/g
	4. <i>Listeria monocytogenes</i>	Shall not be detected in 25 g
(10.3) $a_w \leq 0.82$	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Listeria monocytogenes</i>	Shall not be detected in 25 g
11. Cream		
(11.1) Dried cream	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
(11.2) Cream which is passed through the heat treatment process by Pasteurization	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
	4. <i>Listeria monocytogenes</i>	Shall not be detected in 25 g
12. Ice Cream		
(12.1) Milk ice cream, modified ice cream, mixed ice cream	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 500 cfu/g
	4. <i>Listeria monocytogenes</i>	Shall not be detected in 25 g
(12.2) Milk ice cream, modified ice cream, mixed ice cream (fluid form which is passed through the heat treatment process by Pasteurization and powder or dried form)	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
	4. <i>Listeria monocytogenes</i>	Shall not be detected in 25 g
13 Ready-to-drink products which have $pH \geq 4.3$ and are passed through the heat treatment process by Pasteurization.		
(13.1) Beverages ⁽¹⁾	1. <i>Salmonella</i> spp.	Shall not be detected in 25 ml.
(13.2) Tea	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 ml.
(13.3) Coffee	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/ml
(13.4) Soybean Milk	4. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/ml., except in Bird's Nest Beverage shall not more than 1,000 cfu/ml.
	5. <i>Listeria monocytogenes</i> ⁽²⁾	Shall not be detected in 25 ml.

Food product	Type of pathogen	Requirement
14. Concentrated or dried beverages	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
	4. <i>Clostridium perfringens</i> ⁽³⁾	Shall not more than 100 cfu/g
	5. <i>Listeria monocytogenes</i> ⁽²⁾	Shall not be detected in 25 g
15. Semi-processed Foods		
(15.1) Paste of rice flour, Noodle, Chinese vermicelli, Rice vermicelli, Seasoned Mung bean vermicelli	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
(15.2) Seasonings of noodle in sealed containers, Paste of rice flour, Chinese vermicelli, Rice vermicelli, and Mung bean vermicelli	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 1,000 cfu/g
(15.3) Seasoned soft-boiled rice and rice porridge, mildly seasoned soup, and soup (powdered or dried form)	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 200 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g
(15.4) Mildly seasoned soup, and concentrated soup or Bouillon cubes ⁽⁴⁾	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g
(15.5) Curry and chilli pastes ⁽⁴⁾	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 1,000 cfu/g
16. Some Particular Kinds of Sauces ⁽⁴⁾	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g

Food product	Type of pathogen	Requirement
17. Food Seasonings derived from the Hydrolysis or Fermentation of Soy Bean Protein	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g or ml.
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g or ml.
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g or cfu/ml.
	4. <i>Clostridium perfringens</i>	Shall not more than 1,000 cfu/g or cfu/ml.
18. Alkaline-preserved Eggs	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g
19. Other food products under 1-32 of Annex 1 both food type and process apart from determined in 1-18 of Annex 2	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g or ml., except in drinking water and ice shall not be detected in 100 ml.
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g or ml., except in drinking water and ice shall not be detected in 100 ml.

Remark

⁽¹⁾ Food products under 13.1 as Aloe vera beverages shall determine only *Salmonella* spp., *Staphylococcus aureus*, and *Bacillus cereus*.

⁽²⁾ Food products under 13 contained milk and food products under 14 that concentrated beverages contained milk only shall also determine *Listeria monocytogenes*

⁽³⁾ Food product under 14 as Cereal beverages shall also determine *Clostridium perfringens*

⁽⁴⁾ For food products which are passed through any process that cannot destroy or inhibit microbial growth by thermal treatment before or after a packing step in sealed containers which are made of metal or other rigid forms materials that can prevent transmission of air into the container and can be kept at room temperature.

Annex 3

Requirement on Pathogenic Microorganisms in Foods

Attachment to the Notification of the Ministry of Public Health (No. 364) B.E. 2556 (2013)

Re: Pathogenic Microorganisms in Foods

Food product	Type of pathogen	Requirement
1. Processed Gelatin and Jelly Desserts, not in dried form	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g
2. Sauces in Sealed Containers ⁽⁴⁾		
(2.1) Other kind of sauces	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 1,000 cfu/g
(2.2) Tao Chiew (Fermented soybean)	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 2,500 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 1,000 cfu/g
(2.3) Various kind of sauces	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 500 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 1,000 cfu/g
3. Bread	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 100 cfu/g
4. Husked Rice Flour	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g
5. Fortified Rice with Vitamins	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g

Food product	Type of pathogen	Requirement
6. Ready-to-Eat foods		
(1) Cookie, Biscuit, Cracker, Crisp bread	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 1,000 cfu/g
	4. <i>Clostridium perfringens</i>	Shall not more than 1,000 cfu/g
(2) Ready-to-Eat foods made from cereal or flour basis.	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g
	3. <i>Bacillus cereus</i>	Shall not more than 100 cfu/g
(3) Other Ready-to-Eat foods	1. <i>Salmonella</i> spp.	Shall not be detected in 25 g
	2. <i>Staphylococcus aureus</i>	Shall not be detected in 0.1 g

Remark

⁽⁴⁾ For food products which are passed through any process that cannot destroy or inhibit microbial growth by thermal treatment before or after a packing step in sealed containers which are made of metal or other rigid forms materials that can prevent transmission of air into the container and can be kept at room temperature.