

調製粉乳に対する微生物学的規格基準の国際的比較

調製粉乳に対する各国の微生物学的規格基準

	US(/g) ^{*1}	AU,NZ(/g) ^{*2}				CA(/g) ^{*3}			
		n	c	m	M	n	c	m	M
<i>Salmonella</i>	0	10	0	0/25g	-	20	0	0	0
<i>Listeria monocytogenes</i>	0	-	-	-	-	-	-	-	-
Coliform	10	5	2	<3	10	-	-	-	-
Fecal coliform	3	-	-	-	-	-	-	-	-
<i>Escherichia coli</i>	3	-	-	-	-	10	1	<1.8	10
<i>Staphylococcus aureus</i>	3	5	1	0	10	10	1	10	100
<i>Bacillus cereus</i>	1000	5	0	100	-	10	1	100	10000
<i>Clostridium perfringens</i>	-	-	-	-	-	10	1	100	1000
Aerobic Plate Count	10000	5	2	1000	10000	5	2	1000	10000

*1) Federal Register 66566 Infant formula Record and Record Retention Requirements

*2) Food Standards Australia New Zealand Standard 1.6.1

*3) Standards and Guidelines for Microbiological Safety of Food (Government of Canada) (2003)

調製粉乳に対するCodexの微生物学的規格基準（改正案）

These criteria are to be applied to the finished product (powder form):

Microorganism	n	c	m	M	Class Plan
Mesophilic Aerobic Bacteria*	5	2	10 ³ /g	10 ⁴ /g	3
[Enterobacteriaceae]**	10	0	0/10 g	0/ g	2
[<i>Enterobacter sakazakii</i>]	30	0	0/10 g	0/ g	2
<i>SALMONELLA</i> ***	60	0	0/25 g	0/ g	2

* The proposed criteria for mesophilic aerobic bacteria are reflective of Good Manufacturing Practices and do not include non-pathogenic microorganisms that may be intentionally added such as probiotics.

** Reductions in the levels of Enterobacteriaceae in powdered infant formula will lead to lower levels of *E. sakazakii*.

*** The current requirements for *Salmonella* is considered adequate.

ISO methods are to be used for all determination listed above.

調製粉乳に対するCodexの微生物学的規格基準（現行）

The following microbiological specifications are of an advisory nature in accordance with the General Principles for the Establishment and Application of Microbiological Criteria for Foods adopted by the Codex Alimentarius Commission. The specifications are intended to increase assurance that the provisions of hygienic significance have been met but should not be regarded as mandatory.

Product	Test	Case	Class Plan	n	c	Limit per g	
						m	M
8.3.1 Dried biscuit type product ^a							
8.3.1.1 plain	none	-	-	-	-	-	-
8.3.1.2 coated	Coliforms	5	3	5	2	<3 ^d	20
	Salmonellae ^{b c}	11	2	10	0	0	-
8.3.2 Dried and instant products ^e	Mesophilic aerobic bacteria ^g	6	3	5	2	10 ³	10 ⁴
	Coliforms	6	3	5	1	<3 ^d	20
	Salmonellae ^c	12	2	60	0	0	-
8.3.3 Dried products requiring heating before consumption ^{f h}	Mesophilic aerobic bacteria	4	3	5	3	10 ⁴	10 ⁵
	Coliforms	4	3	5	2	10	100
	Salmonellae ^c	10	2	5	0	0	-

^a Dry shelf-stable products.

^b Applies only to products containing one or more *Salmonella* sensitive ingredients, e.g. chocolate coatings.

^c For the examination of such foods for the presence of *Salmonella*, 25 g samples shall be used and these may be pooled.

^d <3 means no positive tube in the standard-3-tube MPN method.

^e Products intended for consumption after addition of liquid; includes dried infant formulae, instant infant cereals, etc.; microbial limits apply to dry product.

^f Includes supplementary products, e.g. sweetening agents, starches, texturizers and similar products, singly or in combination.

^g Not applicable to products which are produced by a microbial fermentation process.

^h Products intended for consumption after addition of liquid and which are specified to be heated to boiling before consumption; microbial limits apply to dry product.