— Seddaoui Khalef, Representative of the Minister for Finance, Member;

— Mohamed Benghalya, Representative of the Minister for Defence, Member;

— Abdelkader Bennaoum, Representative of the Minister of Post, Information Technology and Communication, Member;

— Idriss Yalaoui, Representative of the National Consultative Council for the promotion of SMEs (NCC - SME), Member;

— Ahmed Ait Ouhamou, Representative of the Investment Credit Guarantee Fund for SMEs (CGCI - SME), Member.

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Order of 26 Rabi al-Thani 1438 corresponding to 25 January 2017, amending Order of 19 Jumada al-Akhira 1435 corresponding to 20 April 2014 appointing the members of the Management Board of the SME Credit Guarantee Fund

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By Order of 26 Rabi al-Thani 1438 corresponding to 25 January 2017, the list of names of the SME Credit Guarantee Fund Management Board's members set by Order of 19 Jumada al-Akhira 1435 corresponding to 20 April 2014 appointing the members of the Management Board of the SME Credit Guarantee Fund was amended as follows:

"- ..... (Unchanged until)

- Zobir Mohamed Sofiane, Representative of the Minister of Land Planning, Tourism and Craft, Member;

- ..... (Unchanged remainder).....".

MINISTRY OF COMMERCE

Interministerial Order of 2 Muharram 1438 corresponding to 4 October 2016 establishing microbiological criteria for food products

———

The Minister of Commerce,

The Minister of Industry and Mines,

The Minister of Agriculture, Rural Development and Fisheries,

The Minister of Water Resources and Environment,

The Minister of Health, Population and Hospital Reform,

Having regard to the amended Presidential Decree No 15-125 of 25 Rajab 1436 corresponding to 14 May 2015, appointing Government members;

Having regard to the Executive Decree No 04-189 of 19 Jumada al-Ula 1425 corresponding to 7 July 2004 establishing the hygiene and health measures applicable to fisheries and aquaculture products;

Having regard to the Executive Decree No 15-172 of 8 Ramadan 1436 corresponding to 25 June 2015 establishing the applicable terms and conditions on food microbiological specifications, in particular Article 8;

Having regard to the amended and supplemented Order of 14 Safar 1415 corresponding to 23 July 1994 on the microbiological specifications of some food products;

Having regard to amended and supplemented Interministerial Order of 22 Dhu al-Hijjah 1426 corresponding to 22 January 2006 establishing the proportions of elements contained in natural mineral waters and spring waters, as well as their process conditions or the authorised additions;

Rule:

Article 1 — Pursuant to the provisions of Article 8 of the abovementioned Executive Decree No 15-172 of 8 Ramadan 1436 corresponding to 25 June 2015, this Decree is intended to establish microbiological criteria for food products.

Art. 2. — Within the meaning of the provisions of this Decree, the following expressions mean:

— **Compliance with microbiological criteria:** achieving the satisfactory or acceptable results referred to in the Annexes of this Decree, during microbiological analyses based on the values set out for these criteria, by taking into account the regulation in force on methods for sampling and performing analyses;

— **Sampling plan:** planned procedure to select or collect distinct samples of a batch, in order to obtain the information sought, such as a decision on the batch compliance. A sampling plan defines the number of individuals in the sample and the decision rule to assess compliance or non-compliance with the specification;

— **Interpretation of analysis results:** conclusion on food quality, as to its acceptability for consumer health, in accordance with the criteria defined in the Annexes of this Decree;

— **Sprout:** product obtained through the germination and development of a seed in water or in another environment, harvested before the first leaves are developed and intended to be consumed whole with the seed.

Art. 3. — Here are the food categories, to which the provisions of this Decree apply:

— Milk and milk products;

— Red and white meat, as well as their derivatives;

— Fishery and aquaculture products;

— Animal and vegetable fats;

— Preserves and semi-preserves;

— Food for infants and young children;

— Cereals and derivatives;

— Ready meals;

— Waters, fruit and vegetable juices and soft drinks;

— Fruits, vegetables and plant products;

— Eggs, egg products, pastries and pastry creams;

— Confectionery;

— Other food products provided for at point 15 of Annex I of this Decree.

Art. 4. — Food products, mentioned in Article 3 above, must not contain any micro-organisms, nor their toxins or metabolites in quantities posing an unacceptable risk for consumer health.

Art. 5. — Actors in charge of the food release for consumption must ensure compliance with the microbiological criteria set out in Annexes I and II of this Decree.

Art. 6. — The microbiological criteria for food products listed in Article 3 above are set out in Annex I of this Decree.

Art. 7. — Food test sample and microbiological analysis result interpretation techniques are set out in Annex II of this Decree.

Art. 8 – The parameters n, c, m and M used in the Annexes of this Decree represent:

– n: Number of units composing the sample;

– m: Number of germs present in one gram or one millilitre of analysed product, which corresponds to the value below which the product quality is considered as satisfactory;

– M: Number of germs present in one gram or one millilitre of analysed product, which corresponds to the value above which the product quality is considered as unacceptable;

— c: Maximum number of analysed product sampling units, which can exceed "m" while being inferior to "M" without the batch being rejected.

Art. 9. — Food preserves, whatever the nature of the packaging used, must pass, before their release for consumption, the stability tests provided for by the regulation in force.

Art. 10. — Stability tests are excluded for food preserves packaged in metal, glass, plastic, metal-plastic or cardboard-metal-plastic with main defects, such as bulging, buckling and leaking.

Art. 11. – At the end of the different tests performed on food preserves:

— No apparent defect, in particular bulging or leaking, must be found;

— pH variation between the steamed sampling units and the control sampling unit at room temperature during the selected periods must not exceed 0.5 units.

Art. 12. — Any provision contrary to this Decree, in particular the provisions of the amended and supplemented Order of 14 Safar 1415 corresponding to 23 July 1994 on the microbiological specifications of some food products, is repealed.

Art. 13. — The provisions of this Decree shall come into force one year after its publication date in the *Official Journal*.

Art. 14. — This Decree shall be published in the *Official Journal* of the People's Democratic Republic of Algeria.

Drawn up in Alger, on 2 Muharram 1438 corresponding to 4 October 2016

The Minister of Commerce
Bekhti BELAIB

The Minister of Industry and Mines
Abdesselem BOUCHOUAREB

The Minister of Agriculture, Rural Development and Fisheries
Abdesselam CHELGHOUM

The Minister of Water Resources and Environment
Abdelkader OUALI

The Minister of Health, Population and Hospital Reform
Abdelmalek BOUDIAF

ANNEX I

Microbiological criteria applicable to food products

1- Milk and milk products

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU (1)/g or CFU/ml)	
		n	c	m	M
Raw milk	Aerobic count at 30 °C	5	2	3.10^5	3.10^6
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Thermotolerant coliforms	5	2	5.10^2	5.10^3
	Salmonella	5	0	Absent in 25 ml	
	Antibiotics	1	—	Absent in 1 ml	
	Listeria monocytogenes	5	0	100	
Pasteurised milk and other pasteurised liquid milk products	Aerobic count at 30 °C	5	2	10^4	10^5
	Enterobacteriaceae	5	0	10	
	Salmonella	5	0	Absent in 25 ml	
UHT milk and sterilised milk	Aerobic count at 30 °C	5	0	10/0.1ml	
Powder milk and powder lactoserum	Enterobacteriaceae	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
Raw milk cheeses	*Escherichia coli*	5	2	10^4	10^5
	Coagulase-pos. staphylococcus	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Milk-based cheeses which have undergone a lower heat treatment than pasteurisation and ripened cheeses made with pasteurised milk or lactoserum or that have undergone a higher heat treatment than pasteurisation	*Escherichia coli*	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Unripened soft cheeses (fresh cheeses) made with pasteurised milk or lactoserum, or which have undergone a higher heat treatment than pasteurisation	*Escherichia coli*	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Raw milk cream	*Escherichia coli*	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	

1- Milk and milk products (continued)

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU (1)/g or CFU/ml)	
		n	c	m	M
Pasteurised cream	Enterobacteriaceae	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Ice creams and frozen milk desserts	Aerobic count at 30 °C	5	2	10^5	10^6
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Enterobacteriaceae	5	2	10	10^2
	Enterobacteriaceae (2)	5	2	50	5.10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Raw butter	*Escherichia coli*	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Pasteurised butter	Enterobacteriaceae	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Concentrated butter	Aerobic count at 30 °C	5	2	5.10^2	5.10^3
	Coagulase-pos. staphylococcus	5	0	Absent	
	Total coliforms	5	0	Absent	
	Salmonella	5	0	Absent in 25 g	
Fermented milks (*Iben, Raib*)	Total coliforms	5	2	3.10^4	3.10^5
	Thermotolerant coliforms	5	2	30	3.10^2
	Coagulase-pos. staphylococcus	5	2	3.10^2	3.10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Yogurts and milk desserts	Enterobacteriaceae	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Caseins-caseinates	Aerobic count at 30 °C	5	2	3.10^4	3.10^5
	Coagulase-pos. staphylococcus	5	0	Absent	
	Total coliforms	5	0	Absent in 0.1 g	
	Salmonella	5	0	Absent in 25 g	

(1) CFU: Colony Forming Unit.
(2) This criterion is applicable to the portioning stage in retail trade, namely during the fractionation or handling for direct sale to the final consumer.

2- Red meat and derivatives

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Carcasses, half-carcasses, quarters or pieces of cattle, sheep, goats and horses (1)	Pseudomonas	5	2	10^4	10^5
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Enterobacteriaceae	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	Absent in 25 g	
Refrigerated or frozen individual portion of red meat (2)	Pseudomonas (3)	5	2	10^5	10^6
	Escherichia coli	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Minced meat	Aerobic count at 30 °C	5	2	5.10^5	5.10^6
	Escherichia coli	5	2	50	5.10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Whole red offal	Aerobic count at 30 °C	5	2	5.10^5	5.10^6
	Pseudomonas (3)	5	2	5.10^5	5.10^6
	Escherichia coli	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Sliced red offal	Aerobic count at 30 °C	5	2	5.10^5	5.10^6
	Pseudomonas (3)	5	2	5.10^5	5.10^6
	Escherichia coli	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
Mechanically separated meat (MSM) (4)	Aerobic count at 30 °C	5	2	5.10^5	5.10^6
	Escherichia coli	5	2	50	5.10^2
	Salmonella	5	0	Absent in 10 g	
Meat preparations	*Escherichia coli*	5	2	5.10^2	5.10^3
	Coagulase-pos. staphylococcus	5	2	5.10^2	5.10^3
	Salmonella	5	0	Absent in 25 g	

(1) Sampling is performed after cauterising the surface.

(2) Sampling concerns the depth and surface with no cauterisation.

(3) This analysis is not carried out if the meat is air-tightly packaged.

(4) These criteria are applicable to products using meat taken from bones, which are covered with flesh after deboning, using mechanical means leading to the destruction or modification of the muscle fibrous structure.

3- Poultry and rabbit meat and their derivatives

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Whole poultry, rabbits (1) and poultry cuts with skin	*Escherichia coli*	5	2	5.10^3	5.10^4
	Coagulase-pos. staphylococcus	5	2	10^3	10^4
	Salmonella	5	0	Absent in 10 g	
Poultry cuts without skin and rabbit cuts	*Escherichia coli*	5	2	10^3	10^4
	Coagulase-pos. staphylococcus	5	2	5.10^2	5.10^3
	Salmonella	5	0	Absent in 10 g	
Poultry products intended to be consumed cooked	*Escherichia coli*	5	2	5.10^2	5.10^3
	Coagulase-pos. staphylococcus	5	2	5.10^2	5.10^3
	Thermotolerant Campylobacter spp.	5	0	10^2	
	Salmonella	5	0	Absent in 25 g	
Raw poultry offal	*Escherichia coli*	5	2	10^3	10^4
	Coagulase-pos. staphylococcus	5	2	5.10^2	5.10^3
	Salmonella	5	0	Absent in 10 g	
Minced poultry meat	Aerobic count at 30 °C	5	2	5.10^6	5.10^7
	Escherichia coli	5	2	5.10^2	5.10^3
	Coagulase-pos. staphylococcus	5	2	5.10^2	5.10^3
	Thermotolerant Campylobacter spp.	5	0	10^2	
	Salmonella	5	0	Absent in 25 g	
Mechanically separated meat (MSM) (2)	Aerobic count at 30 °C	5	2	5.10^5	5.10^6
	Escherichia coli	5	2	50	5.10^2
	Salmonella	5	0	Absent in 10 g	

(1) Whole carcasses sampling on poultry is performed on either side of the wishbone (pectoral muscles and skin). On rabbits, sampling is performed on the thigh.

(2) These criteria are applicable to products using meat taken from bones, which are covered with flesh after deboning, or poultry carcasses, using mechanical means leading to the destruction or modification of the muscle fibrous structure.

4- Meat-based cold cut products

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Raw cold cuts to be consumed cooked (1)	*Escherichia coli*	5	2	5.10^2	5.10^3
	Coagulase-pos. staphylococcus	5	2	5.10^2	5.10^3
	Sulphite-reducing anaerobes	5	2	30	3.10^2
	Salmonella	5	0	Absent in 25 g	
Cooked cold cuts not containing starches (1)	Aerobic count at 30 °C	5	2	10^6	10^7
	Escherichia coli	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	50	5.10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Cooked cold cuts with starches (1)	Aerobic count at 30 °C	5	2	10^6	10^7
	Escherichia coli	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	50	5.10^2
	Bacillus Cereus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	

(1) Casings are taken into account in the sample subject to the analysis only if they are intended to be consumed.

5- Fishery and aquaculture products

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Fishery and aquaculture products made from fish species associated with a high quantity of histidine(1)(2)	Histamine	9	2	100 mg/kg	200 mg/kg
Fishery and aquaculture products which have undergone an enzyme maturation treatment in brine, made from fish species associated with a high quantity of histidine, except for fish sauce(1)	Histamine	9	2	200 mg/kg	400 mg/kg
Fish sauce produced by fermentation of fishery and aquaculture products	Histamine	1	—	400 mg/kg	
Raw fish, cephalopods and molluscs (except for alive bivalve molluscs)(3)	Aerobic count at 30 °C	5	2	10^6	10^7
	Thermotolerant coliforms	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Alive bivalve molluscs and alive marine echinoderms, tunicates and gastropods(4) (5)	*Escherichia coli*	5	1	230 MPN*/100g	700 MPN/100 g
	Salmonella	5	0	Absence in 25 g	
Raw peeled crustaceans	Aerobic count at 30 °C	5	2	10^6	10^7
	Thermotolerant coliforms	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
Raw whole crustaceans and raw echinoderms	Aerobic count at 30 °C	5	2	10^6	10^7
	Thermotolerant coliforms	5	2	10	10^2
	Sulphite-reducing anaerobes	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
Cooked whole crustaceans and cooked echinoderms	Aerobic count at 30 °C	5	2	10^5	10^6
	Thermotolerant coliforms	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Peeled and shelled products of cooked crustaceans and molluscs	Aerobic count at 30 °C	5	2	5.10^5	5.10^6
	Escherichia coli	5	2	4	40
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	

* MPN: Most Probable Number.

5- Fishery and aquaculture products (continued)

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g or CFU/ml)	
		n	c	m	M
Smoked, salted, marinated, etc. fish and other fishery and aquaculture products	Aerobic count at 30 °C	5	2	10^6	10^7
	Thermotolerant coliforms	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Raw fish preparations and other raw fishery and aquaculture products to be consumed cooked	Thermotolerant coliforms	5	2	5.10^3	5.10^4
	Coagulase-pos. staphylococcus	5	2	50	5.10^2
	Salmonella	5	0	Absent in 25 g	
Raw fish preparations and other raw fishery and aquaculture products which can be consumed as such	Thermotolerant coliforms	5	2	10^3	10^4
	Coagulase-pos. staphylococcus	5	2	50	5.10^2
	Bacillus cereus (6)	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Cold cuts made with cooked fishery and aquaculture products to be consumed as such	Aerobic count at 30 °C	5	2	10^6	10^7
	Thermotolerant coliforms	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Bacillus Cereus (6)	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Dried shrimps, fish and echinoderms	Thermotolerant coliforms	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	50	5.10^2
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Deep-frozen or frozen shelled snails	Sulphite-reducing anaerobes	5	0	10^3	
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	Absent in 25 g	

(1) In particular fish species rich in histidine of the *Scombridae* (tuna, skipjacks, mackerels), *Clupeidae* (herrings, sardines), *Engraulidae* (anchovies), *Coryfenidae* (mahi mahi), *Pomatomidae* and *Scombresosidae* families.
(2) Sampling is performed at the flesh level.
(3) Sampling is performed on the surface and deep, after removing the skin, for fish.
(4) Sampling at the level of the flesh and the intra-valvular liquid.
(5) Grouped sample including at least ten different animals.
(6) This analysis is carried out if the preparation contains a starch.

6- Animal and vegetable fats

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Non-rendered animal fats	Aerobic count at 30 °C	5	2	10^4	10^5
	Escherichia coli	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Rendered animal fats	Aerobic count at 30 °C	5	2	5.10^2	5.10^3
	Escherichia coli	5	0	Absent	
	Coagulase-pos. staphylococcus	5	0	Absent	
	Salmonella	5	0	Absent in 25 g	
Anhydrous Milk Fat (AMF)	Aerobic count at 30 °C	5	2	5.10^2	5.10^3
	Total coliforms	5	0	Absent	
	Coagulase-pos. staphylococcus	5	0	Absent	
	Salmonella	5	0	Absent in 25 g	
Smen (salted fermented butter)	Aerobic count at 30 °C	5	2	5.10^2	5.10^3
	Total coliforms	5	0	Absent	
	Yeasts and moulds	5	0	Absent	
	Salmonella	5	0	Absent in 25 g	
Margarine and other vegetable fats	Aerobic count at 30 °C	5	2	10^2	10^3
	Yeasts and moulds	5	2	10	10^2
	Escherichia coli	5	2	4	40
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	

7- Preserves and semi-preserves

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Pasteurised semi-preserves of animal origin (1)	Aerobic count at 30 °C	5	1	10^4	10^5
	Total coliforms	5	0	Absent	
	Sulphite-reducing anaerobes	5	0	Absent	
	Coagulase-pos. staphylococcus	5	0	Absent	
	Salmonella	5	0	Absent in 25 g	
Unpasteurised semi-preserves of animal origin (salted anchovies or in oil, etc.) (1)	Aerobic count at 30 °C	5	1	10^5	10^6
	Total coliforms	5	0	Absent	
	Sulphite-reducing anaerobes (2)	5	0	Absent	
	Coagulase-pos. staphylococcus	5	0	Absent	
	Salmonella	5	0	Absent in 25 g	
Semi-preserves of vegetable origin	Aerobic count at 30 °C	5	2	10^4	10^5
	Escherichia coli	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	

Preserves	Stability tests	Please refer to the procedure provided for by the regulation in force

(1) Revivification of the initial suspension for two (2) hours at the temperature of the laboratory for pasteurised semi-preserves and for 30 min to 45 min for unpasteurised semi-preserves.

(2) Special case of salted anchovies: sulphite-reducing anaerobes: m = M = less than 10 CFU/g.

8- Food for infants and young children

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g or CFU/ml)	
		n	c	m	M
Formulae intended for infants	Aerobic count at 30 °C	5	2	10^3	10^4
	Yeasts and moulds	5	2	10^2	10^3
	Bacillus cereus	5	1	50	5.10^2
	Coagulase-pos. staphylococcus	5	0	Absent	
	Enterobacteriaceae	10	0	Absent in 10 g	
	Cronobacter spp.	5	0	Absent in 10 g	
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	Absent in 25 g	
Follow-on formulae intended for infants and young children	Aerobic count at 30 °C	5	2	10^3	10^4
	Coagulase-pos. staphylococcus	5	0	Absent	
	Enterobacteriaceae	5	0	Absent in 10 g	
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	Absent in 25 g	
Food intended for infants older than six months and young children	Aerobic count at 30 °C	5	2	10^3	10^4
	Bacillus cereus (1)	5	1	10^2	10^3
	Coagulase-pos. staphylococcus	5	0	Absent	
	Enterobacteriaceae	5	0	10	
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	Absent in 25 g	
Formulae requiring to be cooked before consumption (2)	Aerobic count at 30 °C	5	2	10^4	10^5
	Total coliforms	5	2	10^2	10^3
	Yeasts and moulds	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	

(1) This criterion is only sought for cereal-based processed food.

(2) "Cooked" means that the product needs to be heated at a temperature of at least 100 °C during at least 3 minutes.

9- Cereals and derivatives

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Flour and meal	*Escherichia coli*	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Bacillus cereus	5	2	10^3	10^4
	Moulds	5	2	10^3	10^4
	Sulphite-reducing anaerobes	5	2	10^2	10^3
Cereal grains intended for consumption as such and not for processing	Moulds	5	2	10^3	10^4
	Sulphite-reducing anaerobes	5	2	10^2	10^3
Couscous and pasta	Moulds	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	10^2	10^3
Dried pre-cooked pasta (*diouls, ktaef, rechta*, etc.)	Yeasts and moulds	5	2	10^4	10^5
	Escherichia coli	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
Fresh pasta (plain or stuffed)	*Escherichia coli*	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	10^2	10^3
	Bacillus cereus	5	2	10^3	10^4
	Moulds	5	2	10^4	10^5
	Salmonella	5	0	Absent in 25 g	
Bakery products	Aerobic count at 30 °C	5	2	10^3	10^4
	Escherichia coli	5	2	3	30
	Moulds	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella (1)	5	0	Absent in 25 g	

9- Cereals and derivatives (continued)

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Other products derived from cooked cereals (*m'semen, baghrir*, any type of bread, etc.)	Aerobic count at 30 °C	5	2	10^3	10^4
	Escherichia coli	5	2	3	30
	Moulds	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella (1)	5	0	Absent in 25 g	

(1) Detection of *Salmonella* only in cereal derivatives containing eggs.

10- Ready meals

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Ready meals with only cooked ingredients	Aerobic count at 30 °C	5	2	3.10^5	3.10^6
	Escherichia coli	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	50	5.10^2
	Bacillus cereus (1)	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Ready meals with at least one uncooked ingredient	Aerobic count at 30 °C	5	2	10^6	10^7
	Escherichia coli	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	50	5.10^2
	Bacillus cereus (1)	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Sandwiches	*Escherichia coli*	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	50	5.10^2
	Salmonella	5	0	Absent in 25 g	

(1) This analysis is carried out if the preparation contains starch.

11- Waters, beverages, and fruit and vegetable juices

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Natural mineral waters and spring waters	*Escherichia coli*	5	0	Absent in 250 ml	
	Enterococci	5	0	Absent in 250 ml	
	Spores of sulphite-reducing anaerobes	5	0	Absent in 50 ml	
	Total coliforms	5	0	Absent in 250 ml	
	Pseudomonas aeruginosa	5	0	Absent in 250 ml	
Carbonated beverages	Aerobic count at 30 °C	5	3	10	10^2
	Yeasts and moulds	5	2	10	10^2
Heat-treated noncarbonated beverages	Total coliforms	5	0	10	
	Thermotolerant coliforms	5	0	Absent	
	Enterococci	5	0	Absent	
	Sulphite-reducing anaerobes	5	0	Absent in 20 ml	
	Yeasts and moulds	5	2	10	10^2
Fruit juice beverages and milk-based beverages	Aerobic count at 30 °C	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	1	10
	Enterobacteriaceae	5	2	1	10
	Yeasts and moulds	5	2	10	10^2
	Salmonella	5	0	Absent in 25 ml	
Unpasteurised fruit and vegetable juices	*Escherichia coli*	5	2	10^2	10^3
	Yeasts and moulds	5	2	10^4	10^5
	Salmonella	5	0	Absent in 25 ml	
Pasteurised fruit and vegetable juices, nectars and fruit beverages	Yeasts and moulds	5	2	10	10^2

12 - Vegetables, fruits, plants and plant-based products

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Fresh fruits and vegetables	*Escherichia coli*	5	2	10^2	10^3
Fruits and vegetables ready-to-use (1)	Aerobic count at 30 °C	5	2	5.10^6	5.10^7
	Lactic flora	5	2	5.10^5	5.10^6
	Escherichia coli	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Spices, mixtures of spices and dried aromatic herbs	*Escherichia coli*	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	10^3	10^4
	Yeasts and moulds	5	2	10^4	10^5
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Bacillus cereus (2)	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
Dried herbs (teas, herbal teas, etc.)	Aerobic count at 30 °C	5	2	10^4	10^5
	Thermotolerant coliforms	5	2	10	10^2
	Moulds	5	2	10^3	10^4
	Sulphite-reducing anaerobes	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
Fresh aromatic herbs	Aerobic count at 30 °C	5	2	5.10^6	5.10^7
	Escherichia coli	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	

12 - Vegetables, fruits, plants and plant-based products (continued)

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Sprouted seeds ready to be consumed	*Escherichia coli*	5	2	10^2	10^3
	Bacillus Cereus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Sprouts (3)	*Escherichia coli* producing Shiga toxins (STEC) 0157, 026, 0111, 0103, 0145 and 0104: H4	5	0	Absent in 25 g	
Dried fruits (figs, dates, prunes, raisins, etc.)	*Escherichia coli*	5	2	10	10^2
	Moulds	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Nuts (walnuts, almonds, peanuts, etc.)	*Escherichia coli*	5	2	2	20
	Moulds	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Coffee and derivatives	Total coliforms	5	1	10	10^2
	Yeasts and moulds	5	2	10^2	10^3
Preparations of fresh fruit mixture (fruit salad, etc.)	Yeasts and moulds	5	2	10^4	10^5
	Escherichia coli	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	

(1) Washed, peeled, strained, cut, shredded and packaged fruits and vegetables in modified or non-modified atmosphere.

(2) *Bacillus cereus* is detected only for spices and mixtures of spices.

(3) Except for sprouts efficiently heat-treated to eliminate *salmonella spp.* and STEC.

13- Pastries and egg products

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g or CFU/ml)	
		n	c	m	M
Eggs in shells	*Salmonella* (1)	5	0	Absent in 25 g	
Pasteurised liquid eggs, egg and albumen powder, other processed eggs	Aerobic count at 30 °C	5	2	5.10^4	5.10^5
	Total coliforms	5	0	10^2	
	Yeasts and moulds (2)	5	0	10^2	
	Salmonella	5	0	Absent in 25 g	
Cake mixes containing eggs	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Moulds	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Cream pastries, creams, fruit mousse, tiramisu, etc.	Aerobic count at 30 °C	5	2	10^5	10^6
	Escherichia coli	5	2	10	10^2
	Sulphite-reducing anaerobes	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Any other heat-treated egg product	Aerobic count at 30 °C	5	2	10^5	10^6
	Coagulase-pos. staphylococcus	5	0	Absent	
	Enterobacteriaceae	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	

(1) *Salmonella* should not be detected inside or outside the egg in shell.

(2) Only applies to egg powder.

14 - Confectionery

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Chocolate, compound chocolate and derivatives	Aerobic count at 30 °C	5	2	10^3	10^4
	Enterobacteriaceae	5	2	10^2	10^3
	Yeasts and moulds	5	2	10^2	10^3
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
	Listeria monocytogenes	5	0	100	
Cocoa powder	Aerobic count at 30 °C	5	2	10^5	10^6
	Enterobacteriaceae	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Yeasts	5	2	10^2	10^3
	Moulds	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
Other confectionery products (caramels, sweets, nougat, *halkouma*, etc.)	Aerobic count at 30 °C	5	2	10^5	10^6
	Total coliforms	5	2	2	10^2
	Moulds	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	

15 - Other food products

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Powder flavourings and additives	Aerobic count at 30 °C	1	—	10^4	
	Total coliforms	1	—	10^2	
	Escherichia coli	1	—	10	
	Yeasts and moulds	1	—	10^3	
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
Flavoured ice creams and sorbets	Aerobic count at 30 °C	5	2	10^3	10^4
	Total coliforms	5	0	3	
	Yeasts and moulds	5	0	10^2	
	Salmonella	5	0	Absent in 25 g	
Dehydrated soups	Aerobic count at 30 °C	5	2	3.10^5	3.10^6
	Escherichia coli	5	2	10	10^2
	Sulphite-reducing anaerobes	5	2	30	3.10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Bacillus Cereus	5	2	10^3	10^4
	Salmonella	5	0	Absent in 25 g	
Yeasts (dry and fresh)	Aerobic count at 30 °C	5	2	10^5	10^6
	Total coliforms	5	2	10^2	10^3
	Escherichia coli	5	2	3	30
	Salmonella	5	0	Absent in 25 g	
Sugars intended for human consumption and industries	Aerobic count at 30 °C	5	2	20	2.10^2
	Sulphite-reducing anaerobes	5	2	1	10
	Yeasts and moulds	5	2	1	10
	Acidifying germs	5	2	5	50
Gelatine	Aerobic count at 30 °C	5	2	10^4	10^5
	Thermotolerant coliforms	5	2	10^2	10^3
	Sulphite-reducing anaerobes	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	0	Absent	
	Salmonella	5	0	Absent in 25 g	

15 - Other food products (continued)

Food categories	Micro-organisms/ metabolites	Sampling plan		Microbiological limits (CFU/g)	
		n	c	m	M
Unstabilised mayonnaise	Aerobic count at 30 °C	5	2	10^4	10^5
	Yeasts and moulds	5	2	10^2	10^3
	Escherichia coli	5	2	10	10^2
	Coagulase-pos. staphylococcus	5	2	10^2	10^3
	Salmonella	5	0	Absent in 25 g	
Stabilised mayonnaise and other condiment sauces	Yeasts and moulds	5	2	10	10^2
	Escherichia coli	5	2	4	40
	Coagulase-pos. staphylococcus	5	2	10	10^2
	Salmonella	5	0	Absent in 25 g	
Honey	Yeasts and moulds	5	1	10^2	10^3
Vinegar	Aerobic count at 30 °C	5	1	30	10^2

Annex II

Test sample and microbiological analysis result interpretation techniques:

I. Test sample technique:

• For food products of the same nature, the sample must be divided into five (5) units derived from the same batch.

• The laboratory must have approximately 500 g of product, namely 5 times 100 g. These 100 g can be provided by one or more pieces. These samples must comply with the aseptic technique and rules of representation.

• For preserves, the sample must be divided into at least six (6) units derived from the same batch.

• Test sample intended for preparing the initial suspension and decimal dilutions covers:

— Superficial and deep parts, especially for sliced and minced products, and meals prepared in advance;

— The deep part after cauterisation of the product surface, especially for meat (pieces), poultry (pieces), meat products (pieces) and whole fish;

— The homogenised product or the superficial and deep parts, according to the nature of the liquid or semi-liquid product, especially milk products.

• In the case of microbiological tests following food-borne diseases, it is necessary to search for pathogenic germs, toxinogenic germs, and/or their toxins, both on the surface and deep.

II. Microbiological analysis result interpretation:

1. Interpretation according to a three-class plan:

Result interpretation is carried out according to a three-class plan, in the case where the value "c" is different from zero (0).

Results are expressed as follows:

• If the analysis result is inferior or equal to "m", the result of the microbiological criterion is satisfactory;

• If the analysis result does not exceed "M" and if the number of sample units providing a result superior to "m" is between "1" and "c", the result of the microbiological criterion is acceptable;

• If the analysis result exceeds "M" or if the number of sample units providing a result between "m" and "M" is superior to "c", the result of the microbiological criterion is unsatisfactory.

❖ Special case for the histamine in fishery and aquaculture products from fish species associated with a high quantity of histidine, except in fish sauce produced by fermentation of fishery and aquaculture products.

Results are expressed as follows:

- The result of the microbiological criterion is satisfactory when the following requirements are met:

1. The average value observed is inferior or equal to "m";
2. A maximum of c/n values observed are found between "m" and "M".
3. No value observed exceeds the limit "M".

- The result of the microbiological criterion is unsatisfactory when the average value observed exceeds "m", when more c/n values are found between "m" and "M", or when one or more values observed are superior to "M".

2. Interpretation according to a two-class plan:

Result interpretation is carried out according to a two-class plan, in the case where the value "c" is equal to zero (0).

Results are expressed as follows:

- For the expression "absent in":

— The result of the microbiological criterion is satisfactory when the micro-organism is absent in all the sample units;

— The result of the microbiological criterion is unsatisfactory when the micro-organism presence is detected in at least one sample unit. In the case of the following micro-organisms: (thermotolerant) *Listeria monocytogenes, Salmonella, Campylobacter spp.*, the result reveals that the batch controlled is unfit for consumption.

- For the limit value "m=M":

If the analysis result is inferior or equal to "m", the result of the microbiological criterion is satisfactory;

If the analysis result exceeds "m" , the result of the microbiological criterion is unsatisfactory. In the case of *Listeria monocytogenes*, the result reveals that the batch controlled is unfit for consumption.

3. Special case:

The sample is considered as toxic, if the limit is superior or equal to 10^5 for the bacteria: sulphite-reducing anaerobes, Coagulase-positive staphylococcus and *Bacillus Cereus.*

III. Assessment of the microbiological quality of the batch controlled:

The results of the sample microbiological analyses reveal the microbiological quality of the batch:

- Satisfactory quality, if the results of all the microbiological criteria are satisfactory;

- Unsatisfactory quality, if at least one result of one of the microbiological criteria is unsatisfactory;

- Acceptable quality, if at least one result of one of the criteria is acceptable, as no other result is unsatisfactory;

- The batch is considered as toxic if the limit is superior or equal to 10^5 for the bacteria: sulphite-reducing anaerobes, Coagulase-positive staphylococcus and *Bacillus Cereus.*