

Appendix2. Maximum levels (ML) of mycotoxins in foods

1	Aflatoxins total (B ₁ +B ₂ +G ₁ +G ₂)	
	Foodstuffs	ML (µg/kg)
1.1	Grains	
1.1.1	Rice, maize and wheat, raw material ⁽¹⁾	10
1.1.2	Processed cereal-based products	4
1.2	Edible fats and oils ⁽²⁾	10
1.3	Tree nuts, oilseeds ⁽³⁾ and soybeans	
1.3.1	Peanuts, oilseeds and soybeans, raw material ⁽¹⁾ and removal of shell/husk. Exclude the material for refined vegetable oil production	15
1.3.2	Almonds, pistachios, apricot kernels, hazelnuts and brazil nuts, raw material ⁽¹⁾ and removal of shell/husk	15
1.3.3	Other tree nuts, raw material ⁽¹⁾ and removal of shell/husk	10
1.3.4	Peanuts, oilseeds, soybeans and its processed product intended for direct human consumption, removal of shell/husk	4
1.3.5	Almonds, pistachios, apricot kernels, hazelnuts, brazil nuts and its processed product intended for direct human consumption, removal of shell/husk	10
1.3.6	Other tree nuts and its processed product intended for direct human consumption, removal of shell/husk	4
1.4	Dried fruit	
1.4.1	Dried fruit raw material ⁽¹⁾ , exclude of dried figs	10
1.4.2	Dried figs and its processed product intended for direct human consumption	10
1.4.3	Other dried fruit and its processed product intended for direct human consumption	4
1.5	Following species of spices, unless otherwise provided, refers to the product as sold: <ul style="list-style-type: none"> -<i>Capsicum</i> spp. and its processed products, dried fruits thereof, including chillies, chilli powder, cayenne and paprika. -<i>Piper</i> spp. and its processed products, fruits thereof, including white and black pepper. - -<i>Myristica fragrans</i> (nutmeg) -<i>Zingiber officinale</i> (ginger) -<i>Curcuma longa</i> (turmeric) -Mixtures of spices containing one or more of 	10

	the abovementioned spices	
1.6	Other foods	10
2	Aflatoxin M₁	
Foodstuffs		ML (µg/kg)
2.1	Milks ⁽⁴⁾	0.5
2.2	Food for infant and young child ⁽⁵⁾	
2.2.1	Infant formulae ⁽⁶⁾ and follow-up infant formula ⁽⁷⁾	0.025 ⁽⁸⁾
2.2.2	Infant formula for special medical purposes ⁽⁹⁾	0.025 ⁽⁸⁾
3	Aflatoxin B₁	
Foodstuffs		ML (µg/kg)
3.1	Grains	
3.1.1	Rice and maize, raw material ⁽¹⁾	5
3.1.2	Processed cereal-based products, exclude food for infant and young child	2
3.2	Tree nuts, oilseeds ⁽³⁾ and soybeans	
3.2.1	Peanuts, oilseeds and soybeans, raw material ⁽¹⁾ and removal of shell/husk. Exclude the material for refined vegetable oil production	8
3.2.2	Hazelnuts and brazil nuts, raw material ⁽¹⁾ and removal of shell/husk	8
3.2.3	Almonds, pistachios and apricot kernels, raw material ⁽¹⁾ and removal of shell/husk	12
3.2.4	Other tree nuts, raw material ⁽¹⁾ and removal of shell/husk	5
3.2.5	Peanuts, oilseeds, soybeans and their processed product, intended for direct human consumption, removal of shell/husk	2
3.2.6	Hazelnuts, brazil nuts and their processed product, intended for direct human consumption, removal of shell/husk	5
3.2.7	Almonds, pistachios, apricot kernels and their processed product, intended for direct human consumption, removal of shell/husk	8
3.2.8	Other tree nuts and their processed product, intended for direct human consumption, removal of shell/husk	2
3.3	Dried fruit	
3.3.1	Dried fruit raw material ⁽¹⁾ , exclude of dried figs	5
3.3.2	Dried figs and its processed product intended for direct human consumption	6
3.3.3	Other dried fruit and its processed product intended for direct human consumption	2

3.4	Following species of spices, unless otherwise provided, refers to the product as sold: - <i>Capsicum</i> spp. and its processed products, dried fruits thereof, including chillies, chilli powder, cayenne and paprika. - <i>Piper</i> spp. and its processed products, fruits thereof, including white and black pepper. - <i>Myristica fragrans</i> (nutmeg) - <i>Zingiber officinale</i> (ginger) - <i>Curcuma longa</i> (turmeric) -Mixtures of spices containing one or more of the abovementioned spices	5
3.5	Food for infant and young child ⁽⁵⁾	
3.5.1	Cereal based foods for infant and young child ⁽¹¹⁾ and baby food ⁽¹⁰⁾	0.10 ⁽¹²⁾
3.5.2	Infant formula for special medical purposes ⁽⁹⁾	0.10 ⁽⁸⁾
4	Ochratoxin A	
	Foodstuffs	ML (µg/kg)
4.1	Grains	
4.1.1	Rice, maize, wheat, and other cereal grains, raw material ⁽¹⁾	5
4.1.2	Cereal grains and processed cereal-based products intended for direct human consumption	3
4.2	Peanuts and processed peanuts-based products intended for direct human consumption	3
4.3	Dried vine fruits (currants, raisins and sultanas)	10
4.4	Following species of spices, unless otherwise provided, refers to the product as sold:	
4.4.1	- <i>Piper</i> spp., including white and black pepper - <i>Myristica fragrans</i> (nutmeg) - <i>Zingiber officinale</i> (ginger) - <i>Curcuma longa</i> (turmeric)	15
4.4.2	- <i>Capsicum</i> spp., including chillies, chilli powder, cayenne and paprika	20
4.4.3	Mixtures of spices containing one or more of the abovementioned spices	15
4.5	Grape juice, concentrated grape juice as reconstituted and grape nectar, intended for direct human consumption	2
4.6	Coffee	
4.6.1	Roasted coffee beans and roasted coffee powder	5
4.6.2	Soluble coffee (instant coffee)	10

4.7	Food for infant and young child ⁽⁵⁾	
4.7.1	Cereal based foods for infant and young child ⁽¹¹⁾ and baby food ⁽¹⁰⁾	0.50 ⁽¹²⁾
4.7.2	Infant formula for special medical purposes ⁽⁹⁾	0.50 ⁽⁸⁾
5	Patulin	
Foodstuffs		ML (µg/kg)
5.1	Solid apple products, including apple compote, apple puree intended for direct consumption	25
5.2	Beverage	
5.2.1	Apple juices, concentrated apple juices as reconstituted and apple nectars	50
5.2.2	Fermented drinks derived from apples or containing apple juice	50
5.3	Food for infant and young child ⁽⁵⁾	
5.3.1	Apple juice and solid apple products, including apple compote and apple puree, for infant and young child and labelled and sold as such	10.0 ⁽⁸⁾
5.3.2	Baby foods ⁽¹⁰⁾	10.0 ⁽⁸⁾
6	Citrinin	
Foodstuffs		ML (µg/kg)
6.1	Red yeast rice	5000
6.2	Complex food and food supplements containing red yeast material	2000
6.3	Monascus color, the color value is converted to 50	200
7	Fumonisin (B₁+B₂)	
Foodstuffs		ML (µg/kg)
7.1	Grains	
7.1.1	Unprocessed maize ⁽¹⁴⁾	4000
7.1.2	Maize flour and maize meal	2000
7.1.3	Maize-based breakfast cereals and maize-based snacks	800
7.1.4	Maize and other maize-based foods, direct human consumption	1000
7.2	Food for infant and young child ⁽⁵⁾	
7.2.1	Processed maize-based foods for infant and young child ⁽¹¹⁾ and baby foods ⁽¹⁰⁾	200 ⁽¹²⁾
8	Deoxynivalenol (DON)	
Foodstuffs		ML (µg/kg)
8.1	Grains	
8.1.1	Unprocessed durum wheat, oats and maize ⁽¹⁴⁾	1750
8.1.2	Other unprocessed cereals ⁽¹³⁾⁽¹⁴⁾	1250

8.1.3	Flour, meal, semolina and flakes derived from wheat, maize or barley	1000
8.1.4	Pasta (dry, water content approximately 12 %)	750
8.1.5	Cereals, cereal flour, bran and germ for direct human consumption ⁽¹³⁾	750
8.1.6	Bread, biscuits, pastries, breakfast cereals and cereal snacks ⁽¹³⁾	500
8.2	Cereal based foods for infant and young child ⁽¹¹⁾ and baby food ⁽¹⁰⁾	200 ⁽¹²⁾
9	Zearalenone	
Foodstuffs		ML (µg/kg)
9.1	Grains	
9.1.1	Unprocessed maize ⁽¹⁴⁾	350
9.1.2	Unprocessed cereals other than maize ⁽¹³⁾ ⁽¹⁴⁾	100
9.1.3	Cereals, cereal flour, bran and germ for direct human consumption ⁽¹³⁾	75
9.1.4	Maize, maize-based snacks and maize-based breakfast cereals, direct human consumption	100
9.1.5	Bread, biscuits, pastries, cereal snacks and breakfast cereals, exclude maize- snacks and maize-based breakfast cereals ⁽¹³⁾	50
9.2	Refined maize oil	400
9.3	Cereal based foods for infant and young child ⁽¹¹⁾ and baby food ⁽¹⁰⁾ ⁽¹³⁾	20 ⁽¹²⁾

Note.

⁽¹⁾ "Raw materials" means raw materials which have not been further sorted or processed/treatment. The processes or treatment means shelling (not applicable for rice), blanching followed by color sorting, and sorting by specific gravity and color (damage) to removal of raw materials which contaminated with mycotoxins, and reduce levels of aflatoxins.

⁽²⁾ Edible fats and oils are derived from vegetable, animal or marine origin. The raw materials shall comply with the provisions of the agricultural authorities include the good agriculture and animal husbandry; legitimate slaughtering, fishing and harvesting; meet the "Act Governing Food Safety and Sanitation", clean and fit for human consumption.

⁽³⁾ Oilseeds include rapeseeds, sunflower seeds, linseeds and various kinds' melon seeds for extraction of oils, for example, pumpkin seed.

⁽⁴⁾ Milk is the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it, intended for consumption as liquid milk or for further processing. Dehydrated milk (such as evaporated milk, milk powder) according to the concentration factor applicable limits.

- (5) The term “infant” means a person not more than 12 months of age. The term “young child” means a person from the age of more than 12 months up to the age of three years (36 months).
- (6) “Infant formula” means a breast-milk substitute specially manufactured to satisfy, by itself, the nutritional requirements of infant from birth to six months of age up to the introduction of appropriate complementary feeding.
- (7) “Follow-up infant formula” means a food intended for use as formula of the weaning diet for the infant from six months to twelve months of age. Not suitable alone for infant under six months consumption.
- (8) The ML refers to the products ready to use (marketed as such or after reconstitution as instructed by the manufacturer).
- (9) “Infant formula for special medical purposes” means a substitute for human milk or infant formula, by itself, the special nutritional requirements of infant with specific disorder, disease or medical condition during the first months of life up to the introduction of appropriate complementary feeding.
- (10) “Baby food” means food intended to fulfil the particular requirements of infant in good health while they are being weaned, and of young child in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, exclude cereal based foods for infant and young child, and milk-based drinks and similar products.
- (11) “Cereal based foods for infant and young child” means processed cereal based food intended to fulfil the particular requirements of infant in good health while they are being weaned, and of young child in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, including cereals which are or have to be reconstituted with milk or other liquids, and pastas, rusks and biscuits.
- (12) Dry weight basis.
- (13) Rice and rice products are not applicable.
- (14) “Unprocessed” means the raw material have been cleaning, sorting and drying procedures, but not have any physical or thermal treatment.