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SUPPLEMENTARY MATERIAL

Mycotoxins in European Union Regulations (2023-2025)

Sara Vitalini,¹ Marcello Iriti,¹ Lisa Vallone²

¹Department of Biomedical, Surgical and Dental Sciences, University of Milan; ²Department of Veterinary Medicine and Animal Sciences, University of Milan, Lodi, Italy

Correspondence: Lisa Vallone, Department of Veterinary Medicine and Animal Sciences, University of Milan, 26900 Lodi, Italy.
E-mail: lisa.vallone@unimi.it

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Hazelnuts and Brazil nuts, placed on the market for the final consumer or use as an ingredient in food	5 (a)		10 (a)									
Pistachios to be subjected to sorting or other physical treatment before placing on the market for final consumer or use as an ingredient in food				10 (a)								
Pistachios placed on the market for final consumer or use as ingredient in foods				5 (a)								
Other dried fruits				2 (a)								
Date syrup				15 (a)								
Sunflower seeds, pumpkin seeds, (water) melon seeds, hempseeds, soybeans				5 (a)								
Dried vine fruits (currants, raisins and sultanas) and dried figs				8 (a)								
2. HERBS AND SPICES												
Dried herbs				10 (a)								
Dried spices and mixtures of dried spices	5 (a)		10 (a)	15 (a)								
Mixtures of dried spices containing one or more of the abovementioned dried spices: <i>Capsicum</i> spp. (dried fruits thereof, whole or ground, including chillies, chilli powder, cayenne or paprika) Pepper (fruits of <i>Piper</i> spp, including white and black pepper) Nutmeg (<i>Myristica fragrans</i>) Turmeric (<i>Curcuma longa</i>)	5 (a)		10 (a)	20 (a) (only <i>Capsicum</i>)								
Liquorice root (dried) (<i>Glycyrrhiza glabra</i> , <i>G. inflata</i> and other species), including as an ingredient in herbal infusions				20 (a)								
Liquorice extract (pure and undiluted extract, whereby 1 kg of extract is obtained from 3 to 4 kg liquorice root.)				80 (a)								

for use in food in particular beverages and confectionary												
Liquorice confectionery containing ≥ 97 % liquorice extract on dry basis				50 (a)								
Other liquorice confectionery				10 (a)								
Ginger roots (dried) for use in herbal infusions				15 (a)								
Ginger (<i>Zingiber officinale</i>) (dried)	5 (a)		10 (a)									
Marshmallow roots (dried), dandelion roots (dried) and orange blossoms (dried) for use in herbal infusions or in coffee substitutes				20 (a)								
3. CEREALS AND CEREAL-BASED PRODUCTS												
Cereals and products derived from cereals including processed cereal products (cereals relate to products containing at least 80 % cereal products)	2 (a)		4 (a)									
Cereals placed on the market for the final consumer, cereal flour, semolina, bran and germ as final product placed on the market for the final consumer, except rice and rice products						750 (a)	75 (a)		20 (b)			
Cereals placed on the market for the final consumer, maize for popping and popcorn, except rice						750 (c)						
Unprocessed cereal grains except unprocessed maize grains for which it is evident e.g. through labelling or destination, that they are intended for use in a wet milling process only (starch production), except rice and rice products				5 (a)		1000 (c)			50 (d)			
Unprocessed durum wheat grains and oat grains						1750 (a)						
Unprocessed durum wheat and maize grains						1500 (c)			100 (d)			
Unprocessed oat grains with inedible						1750			1250			

final consumer												
Barley, wheat, spelt and oats grains placed on the market for the final consumer												150 (a)
Rye milling products Rye placed on the market for the final consumer												500 (a) 250 (e)*
3.1 PASTA AND BAKERY PRODUCTS												
Pasta (dry) with a water content of approximately 12 %						600 (c)				20 (b)		
Bread, pastries, biscuits, cereal snacks and breakfast cereals, except rice products						500 (a)	50 (a)					
Maize-based snacks and maize-based breakfast cereals							100 (a)	800 (a)				
Bakery wares, cereal snacks and breakfast cereals, including small bakery wares, except rice products (products of which rice or processed products from rice are the only cereal ingredients)						400 (b)				20 (d)		
Bakery wares containing at least 75 % milling products of oats										100 (b)		
Oat flakes										100 (d)		
Breakfast cereals consisting of at least 50 % of cereal bran, milling products of oat grains, milling products of maize grains, whole oat grains, barley grains, maize grains or durum wheat grains, and consisting of less than 40 % of milling products of oat grains and whole oat grains										50 (d)		
Breakfast cereals consisting of at least 50 % of cereal bran, milling products of oat grains, milling products of maize grains, whole oat grains, barley grains, maize grains or durum wheat grains, and of at least 40 % of milling products of oat grains										75 (d)		

and whole oat grains												
Bakery wares, cereal snacks and breakfast cereals not containing oilseeds, nuts or dried fruits				2 (a)								
Bakery wares, cereal snacks and breakfast cereals containing at least 20 % dried vine fruits and/or dried figs				4 (a)								
Other bakery wares, cereal snacks and breakfast cereals containing oilseeds, nuts and/or dried fruits				3 (a)								
3.2 MAIZE DERIVED PRODUCTS												
Milling products of maize placed on the market for the final consumer						750 (c)		1000 (a)				
Milling products of maize not placed on the market for the final consumer						1000 (c)						
Maize flour not placed on the market for the final consumer (At least 90 %, measured by weight, of the particles in the milling product have a size $\leq 500 \mu\text{m}$)						1250 (a)	300 (a)	2000 (a)				
Other milling products of maize not placed on the market for the final consumer (Less than 90 %, measured by weight, of the particles in the milling product have a size $\leq 500 \mu\text{m}$)						750 (a)	200 (a)	1400 (a)				
Maize-based food placed on the market for the final consumer								1000 (a)				
Refined maize oil							400 (a)					
Milling products of cereals (except milling products of rice)						600 (c)			20 (d)			
Pre-cooked polenta ready to eat						250 (c)						
Milling products of oats (including oat bran)									100 (d)			
Bran from cereals other than oats and milling products of maize									50 (d)			
Wheat gluten not placed on the market for the final consumer				8 (a)								

Wheat gluten												400 (a)
4. MILK AND PRODUCTS FOR INFANTS AND YOUNG CHILDREN												
Raw milk, heat-treated milk and milk for the manufacture of milk-based products		0.050 (a)										
Infant formulae, follow-on formulae (intended for infants and young children, food for special medical purposes, and total diet replacement for weight control) and young-child formulae (Young-child formulae' refers to milk-based drinks and similar protein-based products intended for young children)		0.025 (a)										
Baby food (products ready to use placed on the market as such or after reconstitution as instructed by the manufacturer)					10 (a)							
Baby food and processed cereal-based food for infants and young children (applies to the dry matter of the product as placed on the market)	0.10 (a)			0.50 (a)		150 (c) ER	20 (a) ER		10 (b) ER			20 (a)
Food for special medical purposes intended for infants and young children (applies in the case of milk, milk products and similar products to the products ready to use, placed on the market as such or after reconstitution as instructed by the manufacturer, and in the case of products other than milk, milk products and similar products to the dry matter)	0.10 (a)	0.025 (a)		0.50 (a)								
Food for special medical purposes intended for infants and young children (except rice products (products of which rice or processed products from rice are the only cereal ingredients)						150 (c) ER			10 (b) ER			
Apple juice and solid apple products (including apple compote and apple					10 (a)							

puree) for infants and young children and labelled and placed on the market as such, ready to use (placed on the market as such or after reconstitution as instructed by the manufacturer).												
Baby food containing maize and processed maize-based food for infants and young children								200 (a)				
5. BEVERAGES												
Roasted coffee beans and ground roasted coffee				3 (a)								
Soluble coffee (instant coffee)				5 (a)								
Cocoa powder				3 (a)								
Wine and fruit wine (Including semi-sparkling and sparkling wines, excluding liqueur wine and wine with an alcoholic strength of not less than 15 % vol.)				2 (a)								
Aromatised wine, aromatised wine-based drinks and aromatised wineproduct cocktails (the maximum level is function of the proportion of wine and/or grape must present in the finished product)				2 (a)								
Grape juice, grape juice from concentrate, concentrated grape juice, grape nectar, grape must and concentrated grape must, placed on the market for the final consumer (for concentrated grape juice or concentrated grape must, the maximum level applies to juice or must as reconstituted)				2 (a)								
Non-alcoholic malt beverages				3 (a)								
Fruit juices, fruit juices from concentrate (applies to juice as reconstituted), concentrated fruit					50 (a)							

juices and fruit nectars												
Spirit drinks, cider and other fermented drinks derived from apples or containing apple juice					50 (a)							
Solid apple products (including apple compote and apple puree) placed on the market for the final consumer					25 (a)							
6. FOOD SUPPLEMENTS AND NOVEL FOOD												
Food supplements based on rice fermented with red yeast <i>Monascus purpureus</i>										100 (a)		
vitamin D2 mushroom powder	≤ 2 (g)		< 4 (g)									
UV-treated powder of whole <i>Tenebrio molitor</i> larvae (yellow mealworm)	≤ 2 (f)		≤ 4 (f)	≤ 1 (f)		≤ 200 (f)						

AF B1: Aflatoxin B1; AF M1: Aflatoxin M1; SUM AF: Sum of aflatoxins B1, B2, G1, G2; OTA: Ochratoxin A; PAT: Patulin; DON: Deoxynivalenol; ZEA: Zearalenone; FUM: Sum of Fumonisin B1 and B2; T-2 HT-2: Toxins T-2 e HT-2; CITR: Citrinin; ERGOT SCLEROTIA: Sclerotia of *Claviceps* (refers to fungal structures from *Claviceps* species replacing kernels on grain ears or seeds on grass heads, visible as large discoloured sclerotia. These sclerotia contain different classes of alkaloids – Reg. (EU) 2021/1399); ERGOT ALKALOIDS: Alkaloids of *Claviceps*.

Ergot sclerotia: The maximum level applies to unprocessed cereal grains placed on the market before first-stage processing (First stage processing means any physical or thermal treatment, other than drying, of or on the grain. Cleaning, including scouring, sorting (colour sorting where applicable) and drying procedures are not considered to be ‘first-stage processing’ insofar as the whole grain remains intact after cleaning and sorting. Scouring means cleaning cereal by brushing and/or scrubbing it vigorously, combined with dust removal (e.g. aspiration). The scouring could be followed by a colour sorting before milling. In case scouring is applied in the presence of ergot sclerotia, the cereals need to firstly undergo a cleaning step before scouring.

(a): Commission Regulation (EU) 2023/915 of 25 April 2023; (b): Commission Regulation (EU) 2024/1756 of 25 June 2024; (c): Commission Regulation (EU) 2024/1022 of 8 April 2024; (d): Commission Regulation (EU) 2024/1038 of 9 April 2024; (e): Commission Regulation (EU) 2024/1808 of 1 July 2024 (* as from 1 July 2028); (f): Commission Implementing Regulation (EU) 2025/89 of 20 January 2025; (g): Commission Implementing Regulation (EU) 2025/691 of 9 April 2025.

ER: with the exception of rice and rice products.