

**Notice Calling for suggestions, views, comments etc from stakeholders on the draft notification related to limit of Metal Contaminant, Aflatoxin and Mycotoxin.**

F.No. Stds/SP/(Contaminants)/Notification-1/FSSAI-2018- In the Food Safety and Standards (Contaminants, toxins and Residues) Regulations, 2011,-

(a) in regulation 2.1 relating to “METAL CONTAMINANTS”, for sub-regulation 2.1.1, the following shall be substituted, namely:-

“2.1.1

1. Chemicals described in monographs of the Indian Pharmacopoeia when used in foods, shall not contain metal contaminants beyond the limits specified in the appropriate monographs of the Indian Pharmacopoeia for the time being in force.

2. Notwithstanding the provisions of regulation 2.1.1 (1), no article of food specified in Column 2 of the table below shall contain any metal specified in excess of the quantity specified in Column 3 of the said table:

Table

Name of the metal Contaminants	Article of food	Parts per Million (mg/kg or mg/L)
(1)	(2)	(3)
1. Lead	Concentrated soft drinks (but not including concentrates used in the manufacture of soft drinks)	0.5
	Fruit and vegetable juice (including tomato juice, but not including lime juice and lemon juice)	1.0
	Concentrates used in the manufacture of soft drinks, lime juice and lemon juice	2.0
	Fruit Juices (including nectars; ready to drink)	0.05
	Wine	0.2
	Carbonated water , expressed in mg/L	10
	Packaged drinking water (other than mineral water) , expressed in mg/L	0.01
	Natural mineral water, expressed in mg/L	0.01
	Edible oils and fats	0.5
	Edible fats and oils (edible fats and oils not covered by individual standards)	0.1
	Margarine	0.1

Minarine	0.1
Named Animal fats (lard, rendered pork fat, premier jus and edible tallow)	0.1
Olive oil, Virgin olive oil ,Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
Vegetable Oils, crude (oils of arachis, babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rape seed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein and other oils but excluding cocoa butter)	0.1
Vegetable Oils, edible (oils of arachis, babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rape seed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein and other oils but excluding cocoa butter)	0.1
Milks (Concentration factor shall be applied to partially or wholly dehydrated milks)	0.02
Secondary milk products (as consumed)	0.02
Infant formula (ready to use)	0.02
Infant milk substitutes and Infant foods	0.2
All types of sugars, sugar syrup, invert sugar and direct consumption coloured sugars with sulphated ash content exceeding 1.0 percent	5.0
Raw sugars except those sold for direct consumption or used for manufacturing purpose other than the manufacture of refined sugar	5.0
Edible molasses, caramel liquid, solid glucose and starch conversion products with a sulphated ash content exceeding 1.0 per cent	5.0
Anhydrous dextrose and dextrose monohydrate, refined white sugar (sulphated ash content not exceeding 0.03 per cent)	0.5
Hard boiled sugar confectionery	2.0
Ice-cream, iced lollies and similar frozen confections	1.0
Cocoa powder	5.0 on dry fat free substance basis
Yeast and yeast products	5.0 on dry matter basis
Baking powder	10
Turmeric whole and powder	10

Dehydrated onions, dried herbs and spices, curry powder and mix masalas, flavourings, alginic acid, alginates, agar, carrageen and similar products derived from seaweed	10 on dry matter basis
Tea	5.0 on dry matter basis
Liquid pectin, chemicals not otherwise specified, used as ingredients or in the preparation or processing of food	10
Solid pectin	50
Brewed vinegar and Synthetic vinegar	0.01
Assorted subtropical fruits, edible peel	0.1
Assorted subtropical fruits, inedible peel	0.1
Berries and other small fruits	0.2
Citrus fruits	0.1
Pome fruits	0.1
Stone fruits	0.1
Brassica vegetables excluding Kale	0.3
Bulb vegetables	0.1
Fruiting vegetables, cucurbits	0.1
Fruiting vegetables other than cucurbits(excluding mushrooms)	0.1
Leafy vegetables (including brassica leafy vegetables but excluding spinach)	0.3
Legume vegetables	0.2
Root and tuber vegetables	0.1
Other vegetables	2.5
Canned fruit cocktail	1.0
Canned grapefruit	1.0
Canned mandarin oranges	1.0
Canned mangoes	1.0
Canned pineapple	1.0
Canned raspberries	1.0
Canned strawberries	1.0
Canned tropical fruit salad	1.0
Jam (fruit preserves) and jellies	1.0
Mango chutney	1.0
Table olives	1.0
Canned asparagus	1.0
Canned carrots	1.0
Canned green beans and canned wax beans	1.0

Canned green peas	1.0
Canned mature processed peas	1.0
Canned mushrooms	1.0
Canned palmito	1.0
Canned sweetcorn	1.0
Canned tomatoes	1.0
Canned chestnuts and canned chestnut purée	1.0
Canned fish, canned meats, edible gelatin, meat extracts and hydrolysed protein, dried or dehydrated vegetables (other than onions)	5.0
Pickled cucumbers (Cucumber pickles)	1.0
Processed tomato concentrates	1.5
Cereal grains, except buckwheat, canihua and Quinoa	0.2
Pulses	0.2
Poultry meat	0.1
Cattle, edible offal of	0.5
Pig, edible offal of	0.5
Poultry, edible offal of	0.5
Poultry fats	0.1
Meat of cattle, sheep and pig (also applies to fat from meat)	0.1
Corned beef, Luncheon meat, Cooked ham, Chopped meat, Canned chicken, Canned mutton and Goat meat and other related meat products.	2.5
Fish	0.3
Crustaceans	0.5
Cephalopods	1.0
Bivalve Molluscs	1.5
Salt, food grade	2.0
Iron fortified common salt	2.0
Potassium iodate	10
Food colours other than caramel	10 on dry colouring matter basis
Tartrazine	10
Sunset Yellow	10
Erythrosine	10
Indigo carmine	10
Beta-Carotene	10
Chlorophyll	10
Caramel	5.0
Annatto	10

Riboflavin	20
Ponceau 4R	10
Carmoisine	10
Synthetic food colour-preparation and mixtures	10
Brilliant blue FCF	10
Fast green FCF	10
Aluminium lake of Sunset Yellow FCF	10
Sunset yellow dye used in preparation of lake colour	10
Alumina used in preparation of lake colour	10
Beta-apo-8'-carotenal	2.0
Ethylester of Beta-apo-8'-carotenoic acid	2.0
Titanium dioxide	2.0
Steviol Glycoside	1.0
Saccharin Sodium	10
Aspartame (Aspartyl phenyl alanine methyl ester)	10
Sucralose	10
Lactic acid	2.0
Ascorbic acid	2.0
Calcium Propionate	5.0
Sodium metabisulphite	2.0
Potassium metabisulphite	2.0
Sodium benzoate	2.0
Benzoic acid	2.0
Potassium nitrate	2.0
Sorbic acid	2.0
Potassium nitrite	2.0
Sodium propionate	5.0
Sulphur dioxide	5.0
Ammonium hydrogen carbonate	2.0
Trisodium citrate	2.0
Fumaric acid	2.0
L (+) -Tartaric acid	2.0
Dicalcium phosphate	4.0
Phosphoric acid	4.0
Citric acid	0.5
Malic acid	2.0
Sodium hydroxide	2.0
Sodium alginate	5.0
Sodium carboxymethyl cellulose	2.0
Sodium carboxymethyl cellulose, enzyme hydrolysed	3.0
Agar	5.0
Gum Arabic or Acacia gum	3.0
Tragacanth gum	2.0
Gum ghatti	5.0
Calcium alginate	5.0

	Alginic acid	5.0
	Gaur gum	2.0
	Gum Karaya	2.0
	Polyglycerol esters of fatty acids	2.0
	Polyglycerol esters of interesterified ricinoleic acid	2.0
	Glycerol esters of Wood rosin	1.0
	Pectin	2.0
	Carrageenan	5.0
	Butylated hydroxyanisole	2.0
	Dodecyl gallate	2.0
	Propyl gallate	2.0
	Octyl gallate	2.0
	Ascorbyl palmitate	2.0
	Sodium ascorbate	2.0
	Monosodium L-glutamate	1.0
	Mineral Oil (Low viscosity)	1.0
	Mineral Oil (High viscosity)	1.0
	Propylene glycol	2.0
	Sorbitol	1.0
	Foods not specified	2.5
2. Copper	Soft drinks excluding concentrates and Carbonated Water , expressed in mg/L	7.0
	Juice of orange, grape, apple, tomato, pineapple and lemon	5.0
	Toddy	5.0
	Carbonated water , expressed in mg/L	1.5
	Packaged drinking water (other than mineral water) , expressed in mg/L	0.05
	Mineral water , expressed in mg/L	1.0
	Concentrates for soft drinks	20
	Olive oil, Virgin olive oil ,Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
	Infant milk substitute and Infant foods	15 (But not less than 2.8)
	Hard boiled sugar confectionery	5.0
	Cocoa powder	70 on fat free substance basis
	Yeast and yeast products	60 on dry matter basis
	Turmeric whole and powder	5.0
	Tea	150
Pectin-solid	300	

	Chicory-dried or roasted, coffee beans, flavourings/pectin liquid	30
	Colouring matter	30 on dry colouring matter basis
	Edible gelatin	30
	Brewed Vinegar and Synthetic vinegar	0.01
	Tomato ketchup	50 on dried total solids basis
	Tomato puree, paste, powder, and cocktails	100 on dried tomato solid basis
	Pulp and pulp products of any fruit	5.0
	Fresh vegetables	30
	Iron fortified common salt	2.0
	Caramel	20
	Annatto	30
	Chlorophyll	30
	Ammonium Hydrogen Carbonate	5.0
	Polyglycerol esters of fatty acids	25
	Polyglycerol esters of Interesterified ricinoleic acid	25
	Foods not specified	30
3. Arsenic	Soft drink intended for consumption after dilution except carbonated water	0.5
	Juice of orange, grape, apple, tomato, pineapple and lemon	0.2
	Carbonated water , expressed in mg/L	0.25
	Packaged Drinking water (other than mineral water) , expressed in mg/L	0.01
	Natural mineral water, expressed in mg/L	0.01
	Edible fats and oils (edible fats and oils not covered by individual standards)	0.1
	Margarine	0.1
	Minarine	0.1
	Named Animal fats (lard, rendered pork fat, premier jus and edible tallow)	0.1
	Olive oil, Virgin olive oil ,Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
	Vegetable oils, crude (oils of arachis, babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rapeseed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein).	0.1
	Vegetable oils, edible (oils of arachis, babasu,	0.1

coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rapeseed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein).	
Milk	0.1
Infant Milk substitute and Infant foods	0.05
Ice-cream, iced lollies and similar frozen confections	0.5
Hard boiled sugar confectionery	1.0
Chicory-dried or roasted	4.0
Dehydrated onions, edible gelatin, liquid pectin	2.0
Dried herbs, finings and clearing agents, solid pectin all grades, spices	5.0
Turmeric whole and powder	0.1
Pulp and pulp products of any fruit	0.2
Fresh vegetables	1.1
Brewed vinegar and Synthetic vinegar	0.1
Fish and Crustaceans	76
Molluscs	86
Iron fortified common salt	1.0
Potassium iodate	3.0
Preservatives, anti-oxidants, emulsifying and stabilising agents and synthetic food colours	3.0 on dry matter basis
Food colouring other than synthetic colouring	5.0 on dry colouring matter basis
Tartrazine	3.0
Sunset yellow	3.0
Erythrosine	3.0
Indigo carmine	3.0
Beta-Carotene	3.0
Chlorophyll	3.0
Caramel	3.0
Annatto	3.0
Riboflavin	5.0
Ponceau 4R	3.0
Carmoisine	3.0
Synthetic food colour-preparation and mixtures	3.0
Brilliant blue FCF	3.0
Fast green FCF	3.0
Aluminium lake of Sunset yellow FCF	1.0
Sunset yellow dye used in preparation of lake colour	3.0
Alumina used in preparation of lake colour	1.0
Beta -apo-8'-carotenal	3.0
Ethylester of Beta-apo-8'-carotenoic acid	3.0
Titanium dioxide	1.0
Foods not specified	1.1



Saccharin Sodium	2.0
Aspartame (Aspartyl phenyl alanine methyl ester)	3.0
Sucralose	3.0
Steviol Glycoside	1.0
Sodium benzoate	3.0
Benzoic acid	3.0
Potassium nitrate	3.0
Sorbic acid	3.0
Potassium nitrite	3.0
Sodium propionate	3.0
Sulphur dioxide	3.0
Ammonium hydrogen carbonate	0.6
Trisodium citrate	3.0
Fumaric acid	3.0
L (+)- Tartaric acid	3.0
Dicalcium phosphate	3.0
Phosphoric Acid	2.0
Citric Acid	3.0
Malic acid	3.0
Sodium alginate	3.0
Sodium carboxymethyl cellulose	3.0
Agar	3.0
Gum Arabic or Acacia gum	2.0
Tragacanth gum	3.0
Gum Ghatti	3.0
Calcium Alginate	3.0
Alginic acid	3.0
Gaur Gum	3.0
Gum Karaya	3.0
Polyglycerol esters of fatty acids	3.0
Polyglycerol esters of interesterified ricinoleic acid	3.0
Glycerol Esters of Wood Rosin	3.0
Pectin	5.0
Carrageenan	3.0
Butylated hydroxyanisole	3.0
Dodecyl gallate	3.0
Propyl gallate	3.0
Octyl gallate	3.0
Ascorbyl palmitate	3.0
Sodium ascorbate	3.0
Monosodium L-glutamate	2.0
Mineral Oil (Low viscosity)	1.0
Mineral Oil (High viscosity)	1.0
Propylene glycol	3.0
Sorbitol	3.0

4. Tin	Infant Milk substitute and Infant foods	5.0
	Hard boiled sugar confectionery	5.0
	Processed and canned food products	250
	Jam, Jellies and Marmalade	250
	Juice of orange, apple, tomato, pineapple and lemon	250
	Pulp and pulp products of any fruit	250
	Canned foods other than beverages	250
	Canned beverages	150
	Canned (citrus fruits, stone fruits, vegetables, fruit cocktail, mangoes, pineapple, raspberries, strawberries, tropical fruit salad).	250
	Mango Chutney	250
	Table Olives	250
	Turmeric whole and powder	0.01
	Canned mushrooms	250
	Canned tomatoes	250
	Pickled cucumber	250
	Processed tomato concentrates	250
	Canned chestnuts and chestnut puree	250
	Corned beef, Luncheon meat, Cooked ham, Chopped meat, Canned chicken, Canned mutton and Goat meat	250
	Cooked cured chopped meat (for products in tins)	250
	Cooked cured chopped meat (for products in other containers)	50
	Cooked cured ham (for products in tins)	200
	Cooked cured ham (for products in other containers)	50
	Cooked cured pork shoulder (for products in tins)	200
	Cooked cured pork shoulder (for products in other containers)	50
Corned beef (for products in tins)	200	
Corned beef (for products in other containers)	50	

	Luncheon meat (for products in tinfoil containers)	200
	Luncheon meat (for products in other containers)	50
	Canned fish products	200
	Foods not specified	250
5. Cadmium	Packaged Drinking Water (other than mineral water), expressed in mg/L	0.003
	Natural mineral water, expressed in mg/L	0.003
	Infant Milk substitute and Infant foods	0.1
	Turmeric whole and powder	0.1
	Brassica vegetables	0.05
	Bulb vegetables	0.05
	Fruiting vegetables, cucurbits	0.05
	Fruiting vegetables other than cucurbits (excluding tomatoes and edible fungi)	0.05
	Leafy vegetables	0.2
	Legume vegetables	0.1
	Potato, peeled	0.1
	Root and tuber vegetables, excluding potato and celeriac	0.1
	Stalk and stem vegetables	0.1
	Other vegetables	1.5
	Pulses, excluding soybean dry	0.1
	Cereal grains, except buckwheat, canihua and Quinoa (excluding wheat and rice; and bran and germ)	0.1
	Rice, polished	0.4
	Wheat	0.2
	Salt, food grade	0.5
	Fish	0.3
Crustaceans	0.5	
Cephalopods	2.0	
Bivalve Molluscs	2.0	
Carrageenan	1.5	
Foods not specified	1.5	
6. Mercury	Packaged drinking Water (other than mineral water), expressed in mg/L	0.001
	Natural mineral water, expressed in mg/L	0.001
	Fish	0.5
	Non-predatory fish, crustaceans, cephalopods, molluscs	0.5

	Predatory Fish (Tuna, Marlin, Sword Fish, Elasmobranch)	1.0
	Fresh vegetables	1.0
	Salt, food grade	0.1
	Caramel	0.1
	Aluminium lake of Sunset yellow FCF	1.0
	Alumina used in preparation of lake colour	1.0
	Fast green FCF	0.01
	Titanium oxide	1.0
	Sodium hydroxide	1.5
	Carrageenan	1.0
	Foods not specified	1.0
7.Methyl Mercury (Calculated as the element)	All foods	0.25
8. Chromium	Packaged drinking water (other than mineral water), expressed in mg/L	0.05
	Mineral water, expressed in mg/L	0.05
	Refined sugar	0.02
	Gelatin	10
	Fresh vegetables	1.0
	All fishery products	12
	Brilliant blue FCF	50
	Fast green FCF	50
9. Nickel	Packaged drinking water (other than mineral water), expressed in mg/L	0.02
	Mineral water, expressed in mg/L	0.02
	All hydrogenated, partially hydrogenated, interesterified vegetable oils and fats such as vanaspati, table margarine, bakery and industrial margarine, bakery shortening, fat spread and partially hydrogenated margarine, bakery shortening, fat spread and partially hydrogenated soyabean oil.	1.5
	Fresh vegetables	1.0
	Sorbitol	2.0
10. Selenium	Mineral water, expressed in mg/L	0.05
	Packaged drinking water (other than mineral water), expressed in mg/L	0.01
	Sodium metabisulphite	5.0
	Potassium metabisulphite	5.0
	Sulphur dioxide	20
11. Antimony	Fresh vegetables	1.0
	Mineral water, expressed in mg/L	0.005
	Packaged drinking water (other than mineral water)	0.005

	, expressed in mg/L	
	Titanium dioxide	2.0"

(b) in regulation 2.2 relating to "Crop Contaminants and Naturally Occurring Toxic Substances", in sub-regulation 2.2.1, for clause 1, the following shall be substituted, namely:-

" 1. No article of food specified in column (3) of the Table below shall contain any crop contaminant specified in the corresponding entry in column (2) thereof in excess of quantities specified in the corresponding entry in column (4) of the said Table:

Table

S.No.	Name of the Contaminants	Article of the food	Limit µg/kg
(1)	(2)	(3)	(4)
1	Total Aflatoxins	Cereal and Cereal products	15
		Pulses	15
		Nuts:	
		Nuts for further processing	15
		Ready to eat	15
		Dried figs	10
		Oilseeds or oil:	
		Oilseeds for further processing	15
		Ready to eat	15
		Spices	30
Arecanut or Betelnut	15		
Food product containing any of the above mentioned food articles	20		
2	Aflatoxin B1	Cereal and Cereal products	10
		Pulses	10
		Nuts:	
		Nuts for further processing	10
		Ready to eat	10
		Dried figs	10
Oilseeds or oil:			
		10	

		Oilseeds for further processing	10
		Ready to eat	15
		Spices	10
		Arecanut or Betelnut	10
		Food product containing any of the above mentioned food articles	10
3	Aflatoxin M1	Milk (Liquid)	0.5
		Skimmed milk powder	6
		Whole milk powder	4
4	Ochratoxin A	Wheat, rye, barley	20
5	Patulin	Apple juice	50
		Apple juice used as an ingredient in other beverages	50
6	Deoxynivalenol	Wheat	1000''