

Government of the People's Republic of Bangladesh
Bangladesh Food Safety Authority Ministry of Food

DRAFT NOTIFICATION

Dated the _____

S.R.O. No. -/ In exercise of the powers conferred by section 87 of the Food Safety Act 2013 (Act No. 43 of 2013), to be read with section 13 (4), the Bangladesh Food Safety Authority, with the prior approval of the Government hereby enacted the following Regulation, as follows:-

1. Title and commencement.- (1) This Regulations may be called the Food Safety (Chemical Contaminants and Toxins) Regulation, 2023

2) It shall come into force after 6 month from the date of their publication in the Official Gazette and Food Business Operator shall comply with all the provisions of these regulations by

2. Definitions.- (1) In this Regulations, unless there is anything repugnant in the subject or context,-

- a. **“Maximum level (ML)”** means the maximum concentration of a substance to be legally permitted in food and feed.
- b. **“Act”** means the Food Safety Act, 2013 (Act No. 43 of 2013);
- c. **“Toxin”** means a poisonous substance that is a specific product of the metabolic activities of a living organism which is capable of causing different types of diseases having entered inside human body through food or any other mode;
- d. **“Schedule”** means any schedule of this regulation;
- e. **“Contaminant”** refers to contaminant as defined in section 2 (14) of the Act;
- f. **“Acceptable Daily Intake”** refers to the dosage of harmful residues in articles of food which may be consumed without any health risk in proportion to every kilogram of body weight;

(2) The words or expressions used in this Regulation but not provided with any definition or explanation shall carry the same meaning as provided under the Act.


3. Presence of physical contaminant in article of food.- Those physical contaminants shall not be present in articles of food which may render articles of food unsafe by way of presence therein due to production, processing, preparation, packaging, transportation, stocking of food or polluting environment or any other reason:

Provided that, limbs of insects, hairs or any such other exterior substances, such as: wood, glass, paper, sand or gravel-stone, etc shall not be considered as a contaminant until those substances are not in excess of the maximum level specified from schedule-1 to schedule-7 and those substances are not toxicated by carrying different types of contaminants or the presence of those exterior substances is not harmful for health.

4. Controlling use of heavy metals or any other metallic substances in articles of food.-Any person or his agent, shall not produce, import, process, stock, supply, market or sell any article of food specified in column-2 of schedule-1 which is harmful to health for containing heavy-metals or any other metallic substances as specified in column-1 in excess of the maximum level specified in column-3.

5. Controlling use of polycyclic aromatic hydrocarbons in articles of food.-Any person or his agent, shall not produce, import, process, stock, supply, market or sell any article of food specified in column-2 of schedule-2 which is harmful to health for the presence of organic chemical contaminant namely polycyclic aromatic hydrocarbon in excess of the maximum level specified in column-3 or in excess of quantity stipulated by any other legislation for the time being in force.



6. **Controlling use of polychlorinated biphenyls and dioxins in articles of food.**-Any person or his agent, shall not produce, import, process, stock, supply, market or sell any article of food specified in column-2 of schedule-3 which is harmful to health for the presence of polychlorinated biphenyls and dioxins in excess of the maximum level specified in column-3 or in excess of quantity stipulated by any other legislation for the time being in force.
7. **Controlling use of radionuclides in articles of food.**-Any person or his agent, shall not produce, import, process, stock, supply, market or sell any article of food specified in column-2 of schedule-4 which is harmful to health for containing radionuclides specified in column-1 in excess of the maximum level specified in column-3 or in excess of quantity stipulated by any other legislation for the time being in force.
8. **Controlling use of toxins in articles of food, etc.**-Any person or his agent, shall not produce, import, process, stock, supply, market or sell any article of food specified in column-2 of schedule-5 and schedule-6 which is harmful to health for containing toxin specified in column-1 in excess of the maximum level specified in column-3.
9. **Following international standard.**- In order to determine the maximum level of chemical contaminants and toxins with respect to the production, processing, import, marketing or sale of any article of food not mentioned within schedule-1 to schedule-7, the limit as stipulated in the latest edition of codex CXS 193-1995 or internationally recognized standard shall have to be followed.
10. **Propagation of advertisement.**-In order to fulfill the objective of section 41 and 42 of the Act, any person or his agent shall not propagate or sell any advertisement for the production, import, marketing or sell of any article of food containing chemical contaminant, toxin and harmful residues in excess of the maximum level specified from schedule-1 to schedule-7 which may be harmful for the buyer or may mislead public at large.
11. **Inapplicability.**-The provisions of Pure Food Rules 1967 and Food-Safety (Contaminants, Toxins and Harmful Residues)-Regulations, 2017 concerned with this Regulation shall be rendered inapplicable as soon as this Regulation comes into effect.
12. **Publication of English translation.**- (1) After the commencement of this Regulation, the Authority, with prior approval of the Government, if necessary, by notification in the official Gazette, may publish an Authentic Bengali text of the Regulation.
- (2) Provided that, in the event of conflict between the Bangla, the Bangla text shall prevail.
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Schedule-1
Heavy Metals or any other Metallic substance

Names of Heavy Metals and other metallic substances	Names of articles of food	Maximum level (ppm)
1	2	3
Arsenic	Edible oil and fat incl. fat spreads	0.10
	Salt, Food grade	0.50
	Natural Mineral Water / bottled water	0.01
	Rice, husked,	0.35
	Rice, polished	0.2
	Brewed vinegar and synthetic vinegar	0.1
	Pickled cucumbers	1.0
	Carbonated water(mg/L)	0.25
	Dehydrated onions	2
	Dried herbs and spices	5
	Turmeric whole and powder	0.1
	Freshwater fish	5.0
	Marine fish	5.0
	Crustaceans	5.0
	Soft drinks intended for consumptions after dilution except carbonated water	0.5
	Vegetables	1.1
	Hard boiled confectionery	1.0
	Ice creams ice lollies	1.0
	Infant formula and infant foods	0.1
	Infant formula ready to use	0.02
	Juice	0.2
	Not specified Food items	1.1
	Milk	0.1
	Mollusca	86



	Pulps and pulp products of fruits	0.2
	Tea	1.1
Cadmium		
	Brassica vegetables	0.05
	Tuber vegetables	0.05
	Fruiting vegetables and others except Cucurbits	0.05
	Fruiting vegetables, Cucurbits	0.05
	Leafy vegetables or leafy green	0.20
	Legume vegetables	0.10
	Potato	0.10
	Pulse excluding soyabean	0.10
	Root and tuber vegetables except potato and celery	0.10
	Stalk and stem vegetables	0.10
	Crustaceans	0.5
	Fish (fresh water)	0.05
	Marine fish	0.25
	Foods not specified	1.5
	Infant formula and infant foods	0.1
	Other vegetables	1.5
	Turmeric whole and powder	0.1
	Whole, broken or flaked grain, including rice	
	Cereal grains except buckwheat quinoa (excluding wheat rice and bran and germ)	0.10
	Polished rice	0.40
	Wheat	0.20
	Salt, Food grade, sold to consumers	0.50
	Natural Mineral water	0.003
	Mollusca, Cephalopods	2

Names of Heavy Metals and other metallic substances	Names of articles of food	Maximum Level (ppm)
1	2	3
Chromium	Treated sugar	0.02
	All fishery products	12.00
	Mineral water/ bottled water	0.05
	Vegetables	1.0
	Fish (freshwater)	1.0
	Marine fish	1.0
	Crustaceans	1.0
	Vegetables	1.0
Lead	Milk (concentration factor to be applied in concentrated and dehydrated products)	0.05
	Secondary milk products (as consumed)	0.1
	Plant oil and fat	
	Edible oil and fat	0.08
	Olive refined oil	0.10
	Olive virgin oil	0.10
	Olive residual oil	0.10
	Non refined vegetable oil	0.10
	Fat, tallow, fish oil and fats of other animals	
	Meat of cattle and sheep	0.1
	Cattle, Poultry, (Edible offal of)	0.1
	Edible fat and oil	0.08
	Fat spreads and blended spreads	0.04
	Meat and Poultry fats	0.10
	Ice lollies ice -cream, and similar frozen confections	1.0
	Margarine	0.1
	Untreated fresh fruits	
	Fruits from subtropical region, edible peels	0.10
	Fruits from subtropical region, nonedible peels	0.10
	Berries and other small fruits	0.20
	Citrus fruits	0.10
	Olive	1.0
	Pome fruits	0.10

	Stone fruits	0.10
	Canned fruits: Mixed fruits, grapes, mandarin orange, mango, pineapple, raspberry, strawberry and canned tropical fruit salad	1.0

Names of Heavy Metals and other metallic substances	Names of articles of food	Maximum level (ppm)
1	2	3
Lead	Jam and jelly	0.4
	Processed fruit including fruit pulp, fruit topping and coconut milk	
	Mango pickle	1.0
	All type of sugar, sugar syrup, invert sugar and direct consumption-colored sugars with sulphated ash content exceeding 1.0%	5.0
	Refined white sugar	0.5
	Edible molasses, caramel sugars, solid glucose, starch conversion products	5.0
	Untreated fresh vegetable, nut and seed	
	Brassica vegetables	0.30
	Tuber vegetables	0.10
	Fruit vegetables and others except Cucurbits	0.10
	Fruit vegetables, Cucurbits	0.10
	Leafy vegetables or leafy green	0.30
	Legume vegetables	0.20
	Pulse	0.20
	Brewed vinegars and synthetic vinegars	0.01
	Dehydrated vegetables except onion	5.0
	Root and tuber vegetables	0.10
	Dehydrated onions	10
	Food not specified	2.5



Lead	Canned or bottled (pasteurized) or retort pouch vegetables: canned asparagus, carrot, green bean and wax bean, processed chickpeas, mushroom, sweet maize and tomato, canned fruit, canned fruit cocktails	0.1
	Canned chestnut and chestnut puree	0.05
	Processed tomato concentrates	1.5
	Whole, broken or flaked grain, including rice	
	Flaked grain (except Buckwheat, canihua and quinoa, Cereal grain)	0.2
	Fresh meat, poultry and game whole pieces or cut	
	Edible offal of Cattles	0.50
	Edible offal of poultry	0.50
	Bivalve molluscs	1.5
	Canned fish, meat, edible gelatin, meat extract, hydrolyzed protein	5.0
	Meat products	2.5
	Fish (freshwater)	0.3
	Marine fish	0.3
	Crustaceans	0.5
	Hard boiled confectionery	2.0
	Baking powder	10
	Cocoa powder	5.0 on dry fat free substance basis
	Dried Spices and herbs	10 on dry weight basis
	Curry powders, mixed masalas	10 on dry weight basis
	Carbonated water	10
	Concentrated soft drinks	0.5
	Lime lemon juice, concentrates used in manufacture of soft drinks	2.0
	Fruit and vegetable juice	1.0
	Fruit juice obtained from berries exclusively	0.05
	Grape juice	0.04

Lead	Tea	5.0 on dry matter basis
	Mutton, meat of cattle	0.10
	Poultry	0.10
	Salt, food grade sold to consumers	2.0
	Infant formulae (ready to use)	0.01
	Infant formula and follow-on formulae, infant foods	0.2
	Soft drinks (except dairy products)	
	mineral water / bottled water	0.01
	Fruit juice	0.03

Names of Heavy Metals and other metallic substances	Names of articles of food	Maximum degree of tolerance (PPM)
1	2	3
Copper	Any fruit and fruiting substances	5.0
	Tomato puree, paste, powder, juice and mixed juice (based on dried tomato)	100.0
	Tomato ketchup (based on dried tomato)	50.0
	Cocoa powder (fat free substance)	70.0
	Heavily boiled bakery goods made up of sugar	5.0
	Color (based on dried mass)	30.0
	Edible salt containing iron	2.0
	Turmeric and powdered turmeric	5.0
	Brewed vinegar and synthetic vinegar	0.0
	Yeast and yeast containing substances	60.0
	Hard pectin	300.0
	Infant formulae and alternatives of infant milk	15.0 (But not less than 2.8 ppm)
	Beverages except concentrated and carbonated water	7.0
	Juices of Orange, Grape, Apple, Tomato, Pineapple and Lemon	5.0
	For concentrated soft drinks	20.0
	Carbonated water	1.5
	Mineral water, expressed in mg/L	1.0
	Packaged drinking water (other than mineral water), expressed in mg/L	0.05
	Tea	150.0

Names of Heavy Metals and other metallic substances	Names of articles of food	Maximum level (ppm)
1	2	3
Mercury	Salt, food grade, sold to consumers	0.10
	mineral water /bottled water	0.001
	Fish (freshwater)	0.5
	Marine fish	1.0
	Crustaceans	0.5
	Predatory fish like tuna, marlin, sword fish	1.0
	Vegetables	1.0
	Mushroom	0.5
	Foods not specified	1.0
Methyl mercury (calculated as element)	Tuna	1.2
	Alfonsino	1.5
	Marlin	1.7
	Shark	1.6
	Foods not specified	0.25
Nickle	All vegetable oils and fats containing Hydrogen fully and partly and ester like Banaspati, Margarine, bakery shortening, expanding fats and soybean oil containing hydrogen partly	1.5
	Mineral water / bottled water	0.02
	Vegetables	1.0
	Olives	250.00
	Canned or bottled pasteurized fruits	
	Canned fruits-mixed fruits, Grapes, Mandarin Orange, Mango, Pine Apple, Raspberry, Strawberry and canned tropical fruit salads , juices of fruits (canned)	250.00
	Jams, Jellies, marmalades	
	Jam and Jelly	250.00
	Mango pickle and mango chutney	250.00

Signature

Canned or bottled (pasteurized) or retort pouch vegetables: canned asparagus, carrot, green bean and wax bean, processed chick peas, mushroom, sweet maize and tomato	250.00
Tomato concentrates	250.00
Brewed vegetable products	
Cucumber pickle	250.00
Thigh meat cooked in tin made receptacle	200.00
Thigh meat cooked in receptacle other than tin made	50.00
Beef corned in tin made receptacle	200.00
Beef corned in receptacle other than tin made	50.00
Luncheon meat in tin made receptacle	200.00
Luncheon meat in receptacle not made of tin	50.0
Cooked cured chopped meat in ther containers	50
Fish canned products	200
Cooked cured chopped meat in tin plate containers	250
Composite foods (e.g. casseroles, meat pies, mincemeat)-foods that could not be placed in categories 1-15	50
Canned or bottled (pasteurized) fruit juice	
Canned beverages	150.00
Canned food other than beverages	250.00
Foods not specified	250
Hard boiled sugar confectionery	5.0
Infant formula and infant foods	5.0
Jam jellies and marmalades	250



Schedule-2 Polycyclic Aromatic Hydrocarbons (PAH)

Names of articles of food	Maximum level (ppb or µg/kg)	
	Benzo (a) pyrene	Aggregate of Benzo (a) pyrene, Benz (a) anthracene, Benzo (b) fluoranthene and Chrysene
1	2	
Steamed meat and products made from it	2.0	12.0
Steamed fish and steamed fish products, (, fresh water fishes, fish liver and products made from it and not including marine oil	2.0	12.0
Steamed sprats fish and canned steamed sprats fish, bivalve molluscs, (fresh, or frozen), heated meat and heated meat products sold to the consumers.	5.0	30.0
Bivalve molluscs, smoked	6.0	35.0
Processed corny foods and foods prepared for infant and children	1.0	1.0
Infant formulae and follow-on formulae, including infant milk and follow-on milk	1.0	1.0
Dietary foods for special medical purposes intended specifically for infants	1.0	1.0



Schedule-3
Polychlorinated biphenyls (PCBs) and Dioxins

Schedule-3 Polychlorinated biphenyls (PCBs) and Dioxins			
Names of articles of food	Maximum level (ppb or µg/kg)		
	Sum of Sum of PCB 52, fat)-PCDD/F-TEQ fat)-	Sum of PCB WHO-PCBs (pg/g WHO-PCB PCB-TEQ	dioxins (pg/g dioxins and 28, dioxine-like PCB 101, PCB 138, 153 and PCDD/F-PCB 180 (ng/g fat)-ICES-6
1	2		
Fresh meat,poultry and game whole pieces or cut			
Cattle meat and meat products	2.5	4.0	40.0
Poultry meat and meat products	1.75	3.0	40.0
Liver of terrestrial animals (except sheep and animals belonging to the same class	0.3(wet weight basis)	0.5(wet weight basis)	3.0(wet weight basis)
Sheep liver and products belonging to the same class	1.25(wet weight basis)	2.0(wet weight basis)	3.0(wet weight basis)
Fish and fish products,including mollusks, crustaceans and echinoderms			
Fresh fish and fish products (large pakal, large sweet water fishes, fish liver and except marine oil	3.5(wet weight basis)	6.5(wet weight basis)	75.0(wet weight basis)
Muscle of fishes from open water bodies except diadromous fishes and fish product	3.5(wet weight basis)	6.5(wet weight basis)	125.0(wet weight basis)
Large pakal and products belonging to the same class	3.5(wet weight basis)	10.0(wet weight basis)	300.0(wet weight basis)
Fish liver and products belonging to the same class	-----	20.0(wet weight basis)	200.0(wet weight basis)
Poultry egg and egg products	2.5(fat weight basis)	5.0(fat weight basis)	40.0(fat weight basis)
Foodstuffs intended for particular nutritional uses			
Foods prepared for infant and children	0.1(wet weight basis)	0.2(wet weight basis)	1.0(wet weight basis)

Schedule-4

Radionuclides or elements belonging to the same class by naturally or any other mean

Radioactive particle	Names of articles of food	Maximum level (Bq/kg)
^{238}Pu , ^{239}Pu , ^{240}Pu , ^{241}Am	Infant formulae*	1
^{90}Sr , ^{106}Ru , ^{129}I , ^{131}I , ^{235}U	Infant formulae*	100
$^{35}\text{S}^{**}$, ^{60}Co , ^{89}Sr , ^{103}Ru , ^{134}Cs , ^{137}Cs , ^{134}Ce , ^{192}Ir	Infant formulae*	1000
$^3\text{H}^{***}$, ^{14}C , ^{99}Tc	Infant formulae*	1000
^{238}Pu , ^{239}Pu , ^{240}Pu , ^{241}Am	Other foods except infant formulae	10
^{90}Sr , ^{129}I , ^{131}I , ^{235}U	Other foods except infant formulae	100
$^{35}\text{S}^{**}$, ^{60}Co , ^{89}Sr , ^{103}Ru , ^{134}Cs , ^{137}Cs , ^{144}Ce , ^{192}Ir	Other foods except infant formulae	1000
$^3\text{H}^{***}$, ^{14}C , ^{99}Tc	Other foods except infant formulae	10000
^{134}Cs , ^{137}Cs , ^{239}Pu , ^{90}Sr , ^{131}I	Powder milk and milk products****	95
^{134}Cs , ^{137}Cs , ^{239}Pu , ^{90}Sr , ^{131}I	Other foods*****	50

*When directly used

**Expresses limit of naturally added Sulphur

***Expresses limit of naturally added Tritium

****Powdered milk and milk products (milk powder, concentrated milk, cheese, ghee, butter, cerelac, ovaltine, maltova, horlicks, maltova, and milk products)

*****Other foods (rice, wheat, rape seed, fish, meat, pulses, onion, garlic, spices, vegetables, all types of edible oils, beverages and drinking water, and other foods)

Limit of contamination due to the presence of radioactive particles in all types of imported articles of food refers to the state without dilution, concentration or processed when reached at the port.

The Levels apply to radionuclides contained in foods destined for human consumption and traded internationally, which have been contaminated following a nuclear or radiological emergency.

Schedule 5
Toxins (a) Mycotoxins

Name of contaminant	Names of articles of food	Maximum level (ppb)
1	2	3
Aflatoxin total (Sum of B1, B2, G1 and G2)	Almond, brazil nut, hazelnut, pistachio-directly edible or used as ingredient for preparing article of food	10
	Peanut, almond, brazil nut, hazelnut, pistachios, dried figs preserved or processed prior to consumption by human or used as ingredient for preparing article of food	15
	Pulses	15
	Spices/Spice mix	30
	Cereal and cereal products	15
	Food product containing any of the above mentioned food articles	20
	Arecanut or Betelnut	10
Aflatoxin B1	Cereal and cereal products	10
	Dried figs	10
	Nuts:Nuts for further processing & Ready to eat	10
	Oilseeds or oil: Oilseeds for further processing & Ready to eat	10
	Pulses	10
	Spices/Spice Mix	15
	Food product containing any of the above-mentioned food articles	10
Aflatoxin M1	Milk	0.5



Ochratoxin A	Wheat, barley and rye	5
Patulin Patulin	Apple juice	50
	Apple juice used as an ingredient in other beverages	50
Deoxynivalenol (DON)	Cereal based foods for infant and young children	200
	Flour, meal, semolina and flakes derived from wheat, maize or barley	1000
	Cereal grains (wheat, maize and barley) destined for further processing	2000
Fumonisin (B1 + B2)	Raw maize grain	4000
	Maize flour and maize meal	2000

Schedule 6

b) Miscellaneous Mycotoxins and Other toxins

Name of contaminant	Names of articles of food	Maximum level (ppm)
1	2	3
Agaric acid	Foods containing mushroom	100
	Alcoholic Beverages	100
Hydrocyanic acid	Nougat, marzipan or its substitutes or similar products	5
	Canned stone fruit	5
	confectionery	5
	Stone fruit juices	5
	Sago, Cassava flour, Tapioca flour, Manihot flour and their products	10
	Flour derived from Tapioca & Manihot and any food products using the flour	10
	Any other food product not above-mentioned	5.0
Hypericin	Any food product	1.0
Safrole	Meat preparations and meat products, including poultry and game	10
	Fish preparations and fish products	10
	Soups and sauces	10

	Alcoholic beverages	10
	Non alcoholic beverages	10
	Food containing mace and nutmeg	10
Vinylchloride monomer	Any Food	0.01
Acrylonitrile	Any Food	0.02

Footnote: Natural toxins listed in this regulation include naturally occurring toxicants including toxic metabolites of certain microfungi that are not intentionally added to food and feed (mycotoxins). Toxins that are produced by algae and that may be accumulated in edible aquatic organisms such as shellfish (phycotoxins) are also included in this regulation. Mycotoxins and phycotoxins are both subclasses of contaminants



মোঃ আব্দুল কাইউম সরকার
চেয়ারম্যান
বাংলাদেশ নিরাপদ খাদ্য কর্তৃপক্ষ
খাদ্য মন্ত্রণালয়
গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

