

Lumex Instruments Insight into mysteries of Nature

List of Contaminants and Other Adulterating Substances in Foods sold in Canada

#	Substance	Maximum Level	Food
		3.5 ppm*	Fish protein
1	Arsenic	1 ppm	Edible bone meal
		0.1 ppm	Fruit juice; Fruit nectar; Beverages when ready-to-serve; Water in sealed containers other than mineral water or spring water
	Fluoride	650 ppm	Edible bone meal
2		150 ppm	Fish protein
	Lead	10 ppm	Edible bone meal
		1.5 ppm	Tomato paste; Tomato sauce
		0.5 ppm	Fish protein; Whole tomatoes
3		0.2 ppm	Fruit juice; Fruit nectar; Beverages when ready-to-serve; Water in sealed containers other than mineral water or spring water
		0.15 ppm	Evaporated milk; Condensed milk; Concentrated infant formula
		0.08 ppm	Infant formula when ready-to-serve
4	Tin	250 ppm	Canned foods
5	Free gossypol	450 ppm	Cottonseed flour
6	Aflatoxin	15 ppb**	Nut; Nut products
7	Ethylene thiourea	0.05 ppm	Fruits; Vegetables; Cereals
8	2,3,7,8-tetrachlorodibenzoparadioxin	15 ppt***	Fish

*) Health Canada's Bureau of Chemical Safety





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9	Mineral oil	0.3 %	Food requiring the use of mineral oil as part of good manufacturing practice

*parts per million **parts per billion, calculated on the basis of the nut meat portion ***part per trillion

List of Maximum Levels for Various Chemical Contaminants in Foods sold in Canada

#	Contaminant	Maximum Level*	Food
1	Amnesic Shellfish Poisoning toxin (ASP) (Domoic acid)	20 mg/kg	In bivalve shellfish edible tissue
2	Deoxynivalenol (Vomitoxin)	2.0 mg/kg**	In uncleaned soft wheat for use in non-staple foods
2		1.0 mg/kg**	In uncleaned soft wheat for use in baby foods
•	Diarrhetic Shellfish Poisoning toxins (DSP) (sum of okadaic acid and dinophysis toxins (DTX-1, DTX-2 and DTX-3))	1 mg/kg**	In bivalve shellfish digestive tissue
3		0.2 mg/kg**	In bivalve shellfish edible tissue
	Ethyl carbamate	30 µg/kg	In table wines
		100 µg/kg	In fortified wines
4		150 µg/kg	In distilled spirits
		400 µg/kg	In fruit brandies and liqueurs
		200 µg/kg	In sake
5	Glycoalkaloids, total (sum of alpha-solanine and alpha-chaconine)	200 mg/kg	In potato tubers (fresh weight)

*) Health Canada's Bureau of Chemical Safety





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6	Histamines	200 mg/kg 100 mg/kg	In anchovies, fermented fish sauces and pastes In other fish and fish products
7	3-MCPD (3-monochloropropane-1,2-diol)	1 mg/kg	In Asian-style sauces such as soy, oyster, mushroom sauces, etc.
		0.5 mg/kg***	In infant formula and sole source nutrition products, including meal replacement products
8	Melamine	2.5 mg/kg***	In food products containing milk and milk-derived ingredients, except infant formula and sole source nutrition products, including meal replacement products
	Maraum	0.5 mg/kg	In the edible portion of all retail fish, with six exceptions (see the 1 ppm maximum level below).
	Mercury	1 mg/kg	The edible portion of escolar, orange roughy, marlin, fresh and frozen tuna, shark, and swordfish
9	Patulin	50 µg/kg	In apple juice, including the apple juice portion of any juice blends or drinks, and unfermented apple cider
10	PAHs (polycyclic aromatic hydrocarbons)	3 µg/kg B(a)P Toxic Equivalents B(a)P = benzo(a)pyrene	In olive-pomace oils (this is a unique type of oil, distinct from other olive oils such as virgin olive oil)
11	PCBs (polychlorinated biphenyls)	**	Fish Meat & Dairy Products Eggs Poultry
12	Paralytic Shellfish Poisoning toxins (PSP) (saxitoxin equivalents)	0.8 mg/kg	In bivalve shellfish edible tissue
13	Pectenotoxins (PTX) (sum of PTX-1, PTX-2, PTX-3, PTX-4, PTX-6 and PTX-11)	1 mg/kg 0.2 mg/kg	In bivalve shellfish digestive tissue In bivalve shellfish edible tissue

*mg/kg (milligrams per kilogram) is equivalent to µg/g (micrograms per gram) and ppm (parts per million);

µg/kg (micrograms per kilogram) is equivalent to ng/g (nanograms per gram) and ppb (parts per billion)

** under review

*** combined concentration of melamine and cyanuric acid; interim maximum level

*) Health Canada's Bureau of Chemical Safety

