



FAO/WHO Scientific Advice Programme

Issued 9/08/2017

Background

FAO and WHO are collecting data and information through the GEMS/Food Programme on levels and trends of chemicals in food. These data are used to support the FAO/WHO scientific advice (i.e. JECFA, JMPR and ad hoc expert meetings).

Below is the list of substances prepared by the Joint FAO/WHO Secretariat of the Committees and is based on recommendations of the Codex Committees, previous Expert Committees, direct requests from governments, and other interested organizations.

FAO and WHO kindly invite Member States and other interested parties to submit data on the levels of occurrence of the listed chemicals in food commodities. We are requesting new data, covering approximately the last 10 years, be submitted by **30 September 2017**.

How to submit the data

All new data must be submitted through the GEMS data-base, which is easily accessible on the web. To access the GEMS database, go to http://www.who.int/foodsafety/areas_work/chemical-risks/gems-food/en/.

Please read the "GEMS/Food Database Manual" before attempting to submit data to GEMS. To submit the data, you will need an account, and instructions on creating an account are found on page 2 of the manual. For technical questions about submitting data to GEMS, please contact Philippe Verger at WHO (vergerp@who.int) and cc Markus Lipp at FAO (markus.lipp@fao.org).

Date for submission

The submission of data is requested before
30 September 2017

- Provide information in the "Local Food Identifier" or "Notes" fields of the database to allow more specific identification of samples, e.g., Is a food fresh or processed, including canned, preserved, salted, etc.?
- Provide information on "State of Food Analyzed," e.g., cooked or raw, concentrate or ready to drink.

Chemical name	Reference (previous evaluations) and background	Information required
Scopoletin	NA	Occurrence in all food categories and specifically in all noni and noni juice-containing food
Ergot alkaloids	NA	Occurrence in cereals and cereal-containing foods
Lead	JECFA 2011 - http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=3511	Occurrence in all food categories. See also: http://www.who.int/foodsafety/Lead_June-2017.pdf
Ciguatera toxin	NA	Occurrence in fish and bivalve molluscs
Cadmium	JECFA 2013 - http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=1376	Occurrence in cocoa and cocoa products. See also: http://www.who.int/foodsafety/Cd_June2017_obs.pdf
Methyl mercury and total mercury	JECFA 2007 - http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=3083	Occurrence in fish and other seafood. See also: http://www.who.int/foodsafety/MeHg_June2017.pdf
Inorganic arsenic	JECFA 2011 - http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=1863	Occurrence in all food categories
Hydrocyanic acid (HCN).	JECFA 2011 - http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=1086	Occurrence in fermented cassava products. See also: http://www.who.int/foodsafety/HCN_MCX.pdf
Abamectin	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=ABAMECTIN and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=1129	Occurrence in all food categories
Cyfluthrin	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=Cyfluthrin%20(beta-cyfluthrin and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=1093	Occurrence in all food categories
Cyhalothrin	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=Cyhalothrin%20(includes%20lambda-cyhalothrin) and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=2043	Occurrence in all food categories

Cypermethrin	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=Cypermethrins%20(including%20alpha-%20and%20zeta-%20cypermethrin) and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=876	Occurrence in all food categories
Deltamethrin	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=DELTAMETHRIN and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=2322	Occurrence in all food categories
Emamectin benzoate	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=EMAMECTIN%20BENZOATE and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=6188	Occurrence in all food categories
Teflubenzuron	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=TEFLUBENZURON and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=6308	Occurrence in all food categories
Thiabendazole	Pesticide http://apps.who.int/pesticide-residues-jmpr-database/pesticide?name=THIABENDAZOLE and veterinary drug http://apps.who.int/food-additives-contaminants-jecfa-database/chemical.aspx?chemID=2464	Occurrence in all food categories
Pesticides for which an Acute Reference Dose (ARfD) is established	Pesticide (list in annex 1)	Occurrence in all food categories

ANNEX 1: list of pesticides for which an Acute Reference Dose was established by JMPR

Compound	Codex reference number	ARfD (mg/kg bw)
Benzovindiflupyr	261	0.1
Buprofezin	173	0.5
Carbofuran	96	0.001
Chlorpyrifos-methyl	90	0.1
Clothianidin	238	0.6
Cycloxydim	179	2
Cyfluthrin/beta-cyfluthrin	157	0.04
Cypermethrins	118	0.04
Cyproconazole	239	0.06
Cyromazine	169	0.1
Dichlobenil	274	0.3
Dichlorvos	25	0.1
Dicofol	26	0.2
Difenoconazole	224	0.3
Dimethomorph	225	0.6
Diquat	31	0.8
Dithianon	180	0.1
Emamectin benzoate	247	0.02
Etofenprox	184	1
Fenbuconazole	197	0.2
Fenpropathrin	185	0.03
Fenpyroximate	193	0.02
Fenvalerate	119	0.2
Fluensulfone	265	0.3
Fluopyram	243	0.5
Flutriafol	248	0.05
Fluxapyroxad	256	0.3
Imidacloprid	206	0.4
Indoxacarb	216	0.1
Malathion	49	2
Metamidophos	100	0.01
Methoxyfenozone	209	0.9
Phorate	112	0.003
Phosmet	103	0.2
Profenofos	171	1
Propamocarb	148	2
Prothioconazole	232	0.01
Prothioconazole	232	1
Pyraclostrobin	210	0.05
Sedaxane	259	0.3
Spirotetramat	234	1
Sulfoxaflor	252	0.3
Tebuconazole	189	0.3
Thiamethoxam	254	1
Tolfenpyrad	269	0.01
Triadimenol	168	0.08
Triazophos	143	0.001
Triflumizole	270	0.3
Triforine	116	0.3