



AN t-ÚDARÁS UM
CHOSAINT
IASCAIGH MHARA

SEA-FISHERIES
PROTECTION
AUTHORITY

SAFE SUSTAINABLE SEAFOOD
BIA MARA SÁBHÁILTE INBHUNAITHE

North West Waters Advisory Council

Heavy Metal Contaminants

Paris May 2023



Cancer Pagurus Distribution and Depths



AN t-ÚDARÁS UM
CHOSAINT
IASCAIGH MHARA

SEA-FISHERIES
PROTECTION
AUTHORITY

NE Atlantic from North Morocco
(32 deg N) through Western
European coast as far as Norway
(70 deg N)

Benthic species at depths of
6 to 40m, up to 100m!



EU Brown Crab landing patterns



AN t-ÚDARÁS UM
CHOSAINT
IASCAIGH MHARA

SEA-FISHERIES
PROTECTION
AUTHORITY

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
United Kingdom	24.457	25.763	27.273	28.778	32.063	28.986	33.761	32.410	32.018	31.004
Ireland	8.210	6.691	6.269	6.378	7.118	7.191	7.285	6.577	8.261	7.744
Norway	5.773	5.319	4.981	5.241	4.629	4.743	4.926	4.924	5.852	5.365
France	5.916	6.950	6.141	5.925	6.132	4.565	4.490	4.324	3.706	3.193
Netherlands	394	444	470	554	580	519	577	596	572	1.028
Channel Islands	1.179	1.193	1.252	1.173	1.233	996	1.073	984	944	696
Isle of Man	459	554	495	453	519	477	534	967	629	435
Sweden	213	204	204	223	212	224	208	251	271	275
Denmark	61	74	81	69	79	138	292	233	329	259
Belgium	95	104	272	271	272	330	305	280	258	240
Germany	135	144	114	115	107	169	186	158	149	158
Spain	61	65	86	82	49	67	66	61	70	72
Portugal	1	1	2	1	2	3	2	16	11	12
Total	46.954	47.506	47.640	49.263	52.995	48.408	53.705	51.781	53.070	50.480

94%

EU Brown Crab export patterns



AN t-ÚDARÁS UM
CHOSAINT
IASCAIGH MHARA

SEA-FISHERIES
PROTECTION
AUTHORITY

PRES Type	2017		2018		2019		2020	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Live, fresh, Chilled	8.812	42.538	9.480	61.108	11.229	75.700	7.744	39.428
Frozen	8.069	48.926	9.336	72.572	8.112	64.176	5.038	45.810
Other	1.563	8.996	1.421	10.475	1.589	10.787	1.665	10.290
Total	18.443	100.459	20.237	144.155	20.930	150.663	14.448	95.528

Source: EUMOFA elaboration of EUROSTAT, IHS MARKIT, and Statistics Norway

Total exports of Brown Crab by preservation status from major catch nations

Volume (MT); Value (€m)



Species FAO	Year	Production (MT)	Exported outside EU (MT)
CRE	2020	4,834	283
CRE	2021	5,992	345
CRE	2022	5,578	400

MAIN MARKETS FOR IRISH CRAB

EU (France | Spain)

Vietnam | Korea | China | Japan | Canada



- **HM such as mercury, lead, arsenic and cadmium, occur naturally in the environment and in industrial pollutants and therefore in foods through human consumption of animals and plants**
- **Advice to consumers is ‘take a varied and balanced diet to minimise their impact exposure’**
- **Some HM and their related chemical compounds dissolve easily in water, while others continue to exist in particulate form**
- **Relatively low amounts are present in water, soil and the seabed**
- **Shellfish, Crustaceans and predatory-type fish typically carry higher quantities of HM in their bodies. Shellfish ingest and can accumulate HM that have sunk to the ocean floor while predatory-type fish are unable to excrete HM as quickly as they ingest them through their consumption of other seafood**
- **Arsenic in seafood is predominantly the non-toxic Organic form**
- **Shellfish and Crustaceans can accumulate higher levels of Cadmium and Arsenic**

Heavy Metals

- Cadmium (Cd)
- Arsenic (As)



Shellfish and Crustaceans

- Mercury (Hg)
- Lead (Pb)



Predatory fish

- Copper (Cu)
- Chromium (Cr)
- Nickel (Ni)
- Selenium (Se)
- Aluminium (Al)

Regulation (EC) 1881/2006



Regulation (EU) 2023/915



The screenshot shows a web browser window with the address bar displaying the URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R0915>. The page content is as follows:

5.5.2023 EN Official Journal of the European Union L 119/103

COMMISSION REGULATION (EU) 2023/915
of 25 April 2023
on maximum levels for certain contaminants in food and repealing Regulation (EC) No 1881/2006
(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Regulation (EEC) No 315/93 of 8 February 1993 laying down Community procedures for contaminants in food ⁽¹⁾, and in particular Article 2(3) thereof,

Whereas:

- (1) Commission Regulation (EC) No 1881/2006 ⁽²⁾ sets maximum levels for certain contaminants in food. That Regulation has already been amended substantially many times and since a number of new amendments are to be made to that Regulation, it should be replaced.
- (2) Maximum levels should be set at a strict level, which is reasonably achievable by following good agricultural, fishery and manufacturing practices and taking into account the risk related to the consumption of the food. In the case of a possible health risk, maximum levels for contaminants should be set at a level, which is as low as reasonably achievable (ALARA). Such an approach ensures that food business operators apply measures to prevent and reduce the contamination as much as possible in order to protect public health. It is furthermore appropriate for the protection of the health of infants and young children, a vulnerable group, to establish the lowest maximum levels, which are achievable through a strict selection of the raw materials used for the manufacturing of foods for that population, combined, where appropriate, with specific manufacturing practices. This strict selection of the raw materials is also appropriate for the production of specific food placed on the market for the final consumer, for



BEGIN TRANSLATION

National Food Safety Standard Maximum Levels of Contaminants in Foods

Foreword

This standard replaces GB 2762-2017, National Food Safety Standard for Maximum Levels of Contaminants in Foods.

This standard modifies GB 2762-2017 in the following aspects:

- Modifies the terms and definitions;
- Updates the principles of application;
- Modifies the limit requirements on lead in some foods;
- Modifies the limit requirements on cadmium in some foods;
- Modifies the limit requirements on arsenic in some foods;
- Modifies the limit requirements on mercury in some foods;
- Modifies the terms used and location of notes and annotation in Table 5;
- Modifies the limit requirements for Benzo [a] pyrene in grain and its products;
- Modifies the limit requirements for polychlorinated biphenyl in foods;
- Modifies the testing methods used for the limits of contaminants in packaged drinking water;
- Adds the conversion ratio of liquid formula foods for infants and young children;
- Modifies the Appendix A.

National Food Safety Standard for Maximum Levels of Contaminants in Foods

Scope

This standard sets limits for lead, cadmium, mercury, arsenic, tin, nickel, chromium, nitrite, nitrate, benzo[a]pyrene, N-nitrosodimethylamine, polychlorinated biphenyl, 3-chloro-1, 2-propanediol in foods.

Terminologies and definitions

Contaminant

Hazardous chemical substance, not intentionally added to food, but brought into such food in food production (crop growing, animal husbandry and veterinary medicine), processing, packaging, storage, transportation, distribution, and consumption, or as a result of environmental contamination. Contaminants in this standard refer to contaminants other than pesticide residue, veterinary drug residue, biotoxin, and radiomelides.

Search 'Highlight'

Export PDF

Adobe Export PDF

Convert PDF Files to Word or Excel Online

Select PDF File

China Rele...23-0040.pdf

Convert to

Microsoft Word (*.docx)

Document Language:
English (U.S.) Change

Convert

Edit PDF

Convert, edit and e-sign PDF forms & agreements

Free 7-Day Trial



- Commission Regulation EU 2023/915 repealing Regulation EC 1881/2006 (wef 25.5.23)
- Harmonise terminology used across amendments to 1881
- Consolidate all previous amendments to 1881
- Re-cast does not introduce any changes to ML's in foods
- ML's for Lead, Cadmium, MethylMercury in Crustaceans remain at 0.5mg/kg (ppm)



- **Proposed new ML's for iAs in fish and fishery products due in 2023**
- Multi-national dataset being coordinated / analysed by EFSA and COM with view to potential changes in proposed ML's
- Consideration by EU WG on Industrial and Environmental Contaminants to propose new draft regulation
- Stakeholder consultation
- Planned but no current EU contaminants legislation specifically for As



- EU REGULATION 2023/915 (REPLACING 1881/2006)
 - Crustaceans 0.5mg/kg
 - 'The maximum level applies to muscle meat from appendages and abdomen, which means that the cephalothorax of crustaceans is excluded. In case of crabs and crab-like crustaceans (Brachyura and Anomura) the maximum level applies to the muscle meat from appendages'
- CHINESE STANDARD GB2762-2017
 - Crustacean 0.5mg/kg
- GB2762-2022 (REPLACING GB2762-2017)
 - Crustaceans (excluding sea crab and mantis shrimp) 0.5mg/kg
 - Sea crab and mantis shrimp 3.0mg/kg



- EU REGULATION 2023/915 (REPLACING 1881/2006)
- Does not specify ML for fish / fishery products

- CHINESE STANDARD GB2762-2017
- 'Aquatic animal and its products (excluding fish and fish products) iAs = 0.5mg/kg
Fish and fish products = 0.1mg/kg'
- *For products that should have inorganic arsenic limit, total arsenic should be tested first; when the total arsenic level is lower or equals to the inorganic arsenic limit, it is not necessary to test the inorganic arsenic; otherwise, the inorganic arsenic should be tested again.*

- GB2762-2022 (REPLACING GB2762-2017)
- ML is unchanged from 2017 standard



AN t-ÚDARÁS UM
CHOSAINT
IASCAIGH MHARA

SEA-FISHERIES
PROTECTION
AUTHORITY

THANK YOU

bernard.odonovan@sfpa.ie