RECOMMENDATIONS

COMMISSION RECOMMENDATION (EU) 2018/464

of 19 March 2018

on the monitoring of metals and iodine in seaweed, halophytes and products based on seaweed

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292 thereof,

Whereas:

(1) For arsenic, cadmium and lead, maximum levels (MLs) for various foodstuffs are established under Commission Regulation (EC) No 1881/2006 ([1]). However, currently no MLs are established for these substances in seaweed and halophytes, except for the MLs established under this Regulation for food supplements consisting exclusively or mainly of seaweed or products derived from seaweed.

(2) For mercury, currently under Regulation (EC) No 396/2005 of the European Parliament and of the Council ([2]) a maximum residue level (MRL) for algae and prokaryotic organisms is established at the default level of 0,01 mg/kg.

(3) In 2006 the Scientific Committee for food established an upper limit for iodine intake of 600 µg/day for adults and of 200 µg a day for children of 1-3 years ([3]). It indicated that the ingestion of iodine-rich algal products, particularly dried products, can lead to dangerously excessive iodine intakes, if such products contain more than 20 mg iodine/kg dry matter and the exposed population lives in an area of endemic iodine deficiency.

(4) Available occurrence data show that seaweeds contain significant concentrations of arsenic, cadmium, iodine, lead and mercury. As halophytes also grow in a marine environment, it can reasonably be assumed that they will show a similar uptake pattern of these substances and by consequence a similar contamination pattern.

(5) Seaweed and halophytes form an increasingly important contribution to the consumption patterns of certain EU consumers. Therefore it is necessary to assess whether the contribution of arsenic, cadmium, iodine, lead and mercury from seaweed and halophytes to the total exposure of these substances, would necessitate the establishment of MLs for arsenic, cadmium and lead for these commodities or the amendment of the MRL for mercury for algae and prokaryotic organisms or any action to be taken related to the exposure to iodine from these products.

(6) For food additives based on seaweed, specifications are laid down in the annexes to Commission Regulation (EU) No 231/2012 ([4]). For certain of these additives, EFSA recommended that the limits for the impurities of toxic elements should be revised in order to ensure that the use of these additives will not form a significant source of exposure to those toxic elements in particular for infants and young children ([5]). Therefore the exposure to arsenic, cadmium, iodine, lead and mercury in food additives based on seaweed and algae should be assessed.

([1]) Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs (OJ L 364, 20.12.2006, p. 5).
([2]) Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC (OJ L 70, 16.3.2005, p. 1).
([3]) Tolerable upper intake levels for vitamins and minerals — Scientific Committee on Food — Scientific Panel on Dietetic Products, Nutrition and Allergies. February, 2006 http://www.efsa.europa.eu/sites/default/files/efsa_rep/blobserver_assets/ndatolerableuil.pdf
([4]) Commission Regulation (EU) No 231/2012 of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council (OJ L 83, 22.3.2012, p. 1).
([5]) Re-evaluation of agar (E406) as a food additive. *EFSA Journal* 2016; 14(12): 4645.

(7) For arsenic, lead, cadmium and mercury, maximum levels in feed are established under Directive 2002/32/EC of the European Parliament and of the Council ([1]). As certain seaweed species are used as feed, the metal content of these species should also be investigated, both for animal health reasons and in view of the transfer of these metals to food products of animal origin.

(8) Occurrence data for arsenic, cadmium, iodine, lead and mercury in different seaweed species, halophytes and products based on seaweed should be gathered to support a dietary exposure assessment,

HAS ADOPTED THIS RECOMMENDATION:

1. That Member States, in collaboration with food and feed business operators, perform during the years 2018, 2019 and 2020 monitoring on the presence of arsenic, cadmium, iodine, lead and mercury in seaweed, halophytes and products based on seaweed. The monitoring should include edible halophytes including *Salicorna europaea* and *Tetragonia tetragonoides* and a wide variety of seaweed species, reflecting consumption habits and feed uses, including Arame (*Ecklonia bicyclis*), Bladderwrack (*Fucus vesiculosus*), Dulse (*Palmaria palmata*), Hiziki (*Hizikia fusiforme*), Irish moss (*Chondrus crispus*), Oarweed (*Laminaria digitata*), Kombu (*Laminaria japonica, Saccharina japonica*), Nori or Purple laver (*Porphyra and Pyropia* spp.), Rockweed (*Ascophyllum nodosum*), Sea lettuce (*Ulva* sp.), Sea spaghetti (*Himanthalia elongata*), Serrated wrack (*Fucus serratus*), Sponge seaweed (*Codium* sp.) Sugar kelp (*Sacharina latissima*) Wakame (*Undaria pinnatifida*) and Winged kelp (*Alaria esculenta*), in order to enable an accurate estimation of exposure. Also occurrence data should be gathered for food additives based on seaweed, including E400, E401, E403, E404, E405, E406, E407, E407a and E160a(iv).

2. For the monitoring of food, the sampling procedures as laid down in Commission Regulation (EC) No 333/2007 ([2]) should be followed, in order to ensure that the samples are representative for the sampled lot.

3. For the monitoring of feed, the provisions provided for in Commission Regulation (EC) No 152/2009 ([3]) should be followed.

4. The analyses should be carried out in accordance with Annex III to Regulation (EC) No 882/2004 of the European Parliament and of the Council ([4]) by making use of a method of analysis that has been proven to generate reliable results.

5. The analysis of mercury should preferably be carried out by determining the content of methylmercury and total mercury and the analysis of arsenic should be carried out by determining the content of inorganic and total arsenic and, if possible, other relevant arsenic species.

6. The species or additive numbers should be reported and whether fresh, dried or processed products were analysed. Where possible also the origin of the products (wild or cultivated), the date and location of harvest, the part of the seaweed which was analysed, and possible information on the label of the end products should be reported.

([1]) Directive 2002/32/EC of the European Parliament and of the Council of 7 May 2002 on undesirable substances in animal feed (OJ L 140, 30.5.2002, p. 10).
([2]) Commission Regulation (EC) No 333/2007 of 28 March 2007 laying down the methods of sampling and analysis for the control of the levels of trace elements and processing contaminants in foodstuffs (OJ L 88, 29.3.2007, p. 29).
([3]) Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed (OJ L 54, 26.2.2009, p. 1).
([4]) Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (OJ L 165, 30.4.2004, p. 1).

7. The monitoring data should be provided to EFSA on a regular basis, with the information and in the electronic reporting format as set out by EFSA, for compilation into one database.

Done at Brussels, 19 March 2018.

For the Commission
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Member of the Commission