

To: Lead Food Officers
cc: REHIS, COSLA, SFELC

8 Sept 2016

FSS/ENF/16/013

Dear Colleague

Advice to Local Authorities on sale of Apricot Kernels and Bitter Almonds

Following a recent scientific opinion by the European Food Safety Authority (EFSA), FSS recently issued advice regarding the consumption and safety of bitter apricot kernels and bitter almond kernels.

<http://www.foodstandards.gov.scot/news/fss-advise-against-eating-apricot-kernels-due-risk-cyanide-poisoning>

Bitter apricot kernels, including the powdered forms, should not be eaten as they could contain high levels of amygdalin – a cyanogenic glycoside. We also advise that sweet apricot kernels, bitter almond kernels and powdered forms are not eaten, as cyanide can be present in these also. This letter addresses the actions that Local Authorities can take with regards to this issue.

Our advice only applies to raw, unprocessed bitter apricot kernels, bitter almond kernels and powdered forms of them sold for direct human consumption. Kernels used as flavouring in some foods (e.g. marzipan, persipan etc.) have undergone heat treatment which generally reduces the level of cyanide although they remain subject to separate levels under EU flavouring legislation.

The opinion published by EFSA followed an evaluation of the risks to human health associated with the presence of cyanide from apricot kernels and derived products. Apricot kernels contain compounds known as cyanogenic glycosides which produce cyanide upon their degradation. The levels of cyanide produced by apricot kernels can vary greatly. EFSA were unable to differentiate between sweet and bitter varieties of the kernels as the available data indicate that the concentrations of cyanide released by kernels that have been described as sweet can fall within the range of concentrations released by kernels that have been described as bitter.

Discussions have started at a European level and it is likely that maximum levels will be set for cyanide in apricot kernels in order to ensure consumer safety. A level of 40 mg/kg has been proposed; although not finalised, this value could already be used as a guide for cyanide levels in kernels. The European Commission is also proposing to include a requirement that FBOs are able to provide evidence of compliance with maximum level.

Some FBOs have already contacted us saying that they believe the sweet varieties they are selling are safe. Our precautionary advice is not to consume since it is not possible to discriminate between the sweet and bitter varieties. However, if they still wish to continue selling product(s) that contain these, it would be their responsibility to demonstrate that they have very low levels of cyanide and that consumption of the product would be safe.

A 'safe' level would be only where estimated exposures are below the acute reference dose (ARfD) of 20 µg/kg body weight identified by EFSA (the ARfD is the amount of cyanide that can be ingested in a period of 24 hours or less, without appreciable health risk to the consumer). The exposure to cyanide from consumption of apricot kernels would be calculated from the analytical results and consumption - based on recommended portion sizes.

Action to be taken:

If Local Authorities find any FBOs in their area who are selling raw, unprocessed bitter apricot and bitter almond kernels and their powdered forms for direct human consumption, please request for the product to be removed from sale and bring to their notice the advice provided by the FSA. If the FBO wishes to continue selling the products, they must prove that the levels of cyanide are very low (below 40 mg/kg at this stage).

While maximum levels and other legislative measures to take enforcement action are being finalised, Articles 14 and 19 of the General Food Law Regulation (EC) No 178/2002 can be used to take action on products that contain cyanide at levels higher than 40 mg/kg.

Yours sincerely



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