Food additives and their re-evaluation in the EU

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EU legislation on food additives is based on the principle that only additives that have passed a full safety assessment are authorised for use. Despite this, a recent Eurobarometer survey indicated that 66% of European consumers were concerned over the presence of additives in food. In addition, there is little understanding as to why the European Food Safety Authority (EFSA) is reassessing food additives currently in use.

What are food additives?

Food additives are substances which are not normally consumed as a food, but are added intentionally to foodstuffs to perform certain technological purposes. These include:1

- Antioxidants (to prevent fat reacting with oxygen leading to colour changes or rancidity)
- Colours (to improve, restore, or add colour)
- Emulsifiers, stabilisers and gelling agents (to help mix ingredients)
- Preservatives (to improve shelf-life by preventing microbial deterioration)
- Sweeteners (to give a sweet taste)

Legislative framework for authorisation of food additives

Under EU law, all food additives must be authorised before they can be used in food. A food additive can only be authorised if it does not, on the basis of the available scientific evidence, pose risks to the health of the consumer at the proposed level of use. There must also be a technological need for the additive that cannot be achieved by other means. In order to authorise a new additive, the applicant must make a formal request to the European Commission. A detailed application is then presented to EFSA for assessment.

EFSA is an independent scientific body, which reviews all relevant studies related to the additive (data on toxicity, human exposure studies, etc.) and gives an opinion on the safety of the additive for the expected conditions of use. Once this opinion is published, the European Commission and food additive experts from all EU Member States will consider it, and will decide whether the additive should be authorised for use in the EU. If the decision is favourable, the application will then pass before the European Council and the European Parliament (to ensure its complete compliance with EU legislation) before the additive is finally authorised and added to the list of EU approved additives.1 The list is published in Commission Regulation (EU) No 1129/2011.2

Authorised food additives are given an E number. These are used to simplify the labelling of substances, which often have complex chemical names. On a label, the additive must be designated by the name of its functional class, followed by its specific name, or its E number e.g. “sweetener: aspartame” or “sweetener:
E951”. Hence an E number is a guarantee that the additive has successfully passed a thorough scrutiny by the EFSA and European regulators.

There are hundreds of additives; however, only those included on the list of EU approved additives (and only under the indicated conditions) can be used. Some food additives such as lactic acid (E270) and citric acid (E330) can be used in almost all processed foodstuffs, while others such as natamycin (E235) have more restricted use. The latter can only be used as a preservative for the surface treatment of cheese and dried sausages.

Why are food additives authorised before the 20th January 2009 being re-evaluated?

Although all food additives currently in use in the EU have been fully assessed and are considered safe in foodstuffs at their permitted levels, the Commission has asked EFSA to systematically re-evaluate all additives that were authorised for use before the 20th January 2009. Many of the original evaluations took place decades ago, so a re-examination of each additive in light of the latest scientific information, is considered appropriate. The Commission will use this opportunity to determine whether a revision of the current conditions of use for each food additive is required, e.g. changing its acceptable daily intake (ADI). Complete removal of an additive from the permitted list is also an option, if it is deemed necessary.

How is the re-evaluation being conducted?

In order to prioritise assessments, a programme for the re-evaluation of approved food additives has been set out using specific criteria (e.g. time since last evaluation, availability of new data, extent of use). For efficiency and practical purposes, the assessments will be conducted by functional class (e.g. preservatives, antioxidants), where possible. EFSA’s task is to examine the original opinion and dossier, additional data submitted by the Commission and Member States, and any other relevant literature published since the last evaluation. ‘Public calls’ for information will also be made to assist EFSA in retrieving all relevant data for consideration.

Current status of the re-evaluation process?

Since food colours were among the first to be authorised, they have been given the highest priority for re-evaluation. Colour Red 2G (E128) was notably suspended from use in 2007 following new scientific evidence that its use could be a safety concern.

Next on the priority list are preservatives and antioxidants (to be re-evaluated by the end of 2015) followed by emulsifiers, stabilisers and gelling agents (to be re-evaluated by the by end of 2016). All remaining food additives will be re-evaluated by the end of 2020.

Further information
Eurobarometer survey on consumers’ perception of food-related risks, November 2010

References