Food additives legislation and surveillance in Ireland

Emer O’Reilly and Rhodri Evans
How to get from here....
....to this?
From Brussels to Ireland

- Directives / Regulations negotiated and agreed in Brussels – published in the Official Journal

- Transposed into Irish National Legislation

- Achieving Compliance – “enforcement”
  - advice to Industry
  - Labelling and composition checks
  - Sample product on the market
  - Monitoring imported products

- Monitoring intake of food additives (Áine’s presentation)
Information on FSAI website

Introduction

Regulation (EC) No 1333/2008 harmonises the use of food additives in foods in the European Union. This includes the use of food additives in foods covered by Directive 2009/39/EC on foodstuffs intended for particular nutritional uses and the use of certain food colours for the health marking of meat and the decoration and stamping of eggs.

A ‘food additive’ is defined in Regulation (EC) No 1333/2008 as meaning ‘any substance not normally consumed as a food in itself and not normally used as a characteristic ingredient of food, whether or not it has nutritive value, the intentional addition of which to food for a technological purpose in the manufacture, processing, preparation, treatment, packaging, transport or storage of such food results, or may be reasonably expected to result, in it or its by-products becoming directly or indirectly a component of such foods’.

Additives are categorised as follows:

<table>
<thead>
<tr>
<th>Categories of Food Additives</th>
<th>Acid</th>
<th>Emulsifying Salt</th>
<th>Preservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td></td>
<td>Firming agent</td>
<td>Packaging gas</td>
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<tr>
<td>Acidity regulator*</td>
<td></td>
<td>Flavour enhancer</td>
<td>Propellant gas</td>
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<tr>
<td>Anti-caking agent</td>
<td></td>
<td>Flour treatment agent</td>
<td>Raising agent</td>
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<tr>
<td>Anti-foaming agent</td>
<td></td>
<td>Foaming agent</td>
<td>Sequestrant</td>
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<tr>
<td>Anti-oxidant</td>
<td></td>
<td>Gelling agent</td>
<td>Stabiliser</td>
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<tr>
<td>Bulking agent</td>
<td></td>
<td>Glazing agent (includes lubricants)</td>
<td>Sweetener</td>
</tr>
<tr>
<td>Carrier</td>
<td></td>
<td>Humectant</td>
<td>Thickener</td>
</tr>
<tr>
<td>Colour</td>
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</tbody>
</table>
National legislation

European Communities (Additives, Colours and Sweeteners in Foodstuffs) Regulations, 2000 (S.I. No. 437 of 2000)

Amended by:
- European Communities (Additives, Colours and Sweeteners in Foodstuffs) (Amendment) Regulations, 2001 (S.I. No. 342 of 2001)
- European Communities (Additives, Colours and Sweeteners in Foodstuffs) (Amendment) Regulations (S.I. No. 344 of 2002)
- European Communities (Additives, Colours and Sweeteners in Foodstuffs) (Amendment No 3) Regulations (S.I. No. 380 of 2002)
- European Communities (Additives, Colours and Sweeteners in Foodstuffs) (Amendment) Regulations 2005 (S.I. No. 61 of 2005)
- European Communities (Additives, Colours and Sweeteners in Foodstuffs) (Amendment) (No. 2) Regulations 2005 (S.I. No. 192 of 2005)
- European Communities (Additives, Colours and Sweeteners in Foodstuffs) (Amendment) (No. 3) Regulations 2006 (S.I. No. 193 of 2008)
- European Communities (Additives, Colours and Sweeteners in Foodstuffs) (Amendment) Regulations 2008 (S.I. No. 34 of 2008)

Note: The above Irish legislation which remains on the Irish Statute Book transposes the previous legislation which was repealed by Regulation (EC) No 1333/2008 (However the Annexes will continue to apply until at least January 2011), the Department of Health and Children are working on the transposition of this Regulation.

General requirements

Regulation (EC) No 1333/2008 lays down rules on food additives used in foods with a view to ensuring the effective functioning of the internal market whilst ensuring a high level of protection of human health and a high level of consumer protection, including the protection of consumer interests and fair practices in food trade, taking into account, where appropriate, the protection of the environment.

The Regulation provides for:
- Community lists of approved food additives (these will be set out in Annexes II and III following a review which is due to be completed by 20th January 2011, in the meantime the Annexes to the previous rules apply)
Labelling of additives

CARBONATED STRAWBERRY FLAVOUR DRINK WITH SWEETENERS

INGREDIENTS

CARBONATED WATER, CITRIC ACID, FLAVOURINGS, SWEETENERS: ASPARTAME, ACESULFAME K, PRESERVATIVE: SODIUM BENZOATE; STABILISER: CARBOXYMETHYLCELLULOSE; COLOUR: PONCEAU 4R. CONTAINS A SOURCE OF PHENYLALANINE
Other Labelling provisions for additives

- The labelling of a table top sweetener containing polyols and/or aspartame must bear the following warnings:

  **polyols:** “excessive consumption may induce laxative effects”

  **aspartame:** “contains a source of phenylalanine”

- Some new provisions concerning the labelling of additives are provided for in Regulation 1333/2008/EC and these include the following:
Labelling provisions for additives intended for sale to the final consumer (ART 22)

- Manufacturers of table-top sweeteners shall make available by appropriate means the necessary information to allow for their safe use by consumers. Guidance for the implementation of this paragraph may be adopted. (NEW)

- The rest of the provisions for labelling of additives to the final consumer remain unchanged.
Labelling requirements for foods containing certain food colours-(article 24)

Foods containing one or more of the following food colours shall include the additional information below on the label of the foodstuff.

- Sunset Yellow (E 110)*
- Quinoline Yellow (E 104)*
- Carmoisine (E 122)*
- Allura Red (E 129)*
- Tartrazine (E 102)*
- Ponceau 4R (E 124)*

“name or E number of the Colour(s): may have an adverse effect on activity and attention in children”

This requirement applied from 20th of July 2010.
Labelling requirements for foods containing certain food colours-(article 24)-cont’d

- This requirement applies to all products placed on the market from the 20th of July onwards, whereas foods placed on the market or labelled before this date can continue to be marketed until their use by date or date of minimum durability.

* This additional labelling requirement applies to all food and drink with the exception of foods where the colour(s) has been used for the purposes of health or other marking on meat products or for stamping or decorative colouring on eggshells. In addition alcoholic drinks containing alcohol above 1.2% by volume do not need to carry the warning.
Additives guidance document - 2001
Additives guidance document - 2010
Guidance on specific issues

Guidance Document for Nitrate/Nitrite Sampling of Meat Products

The use of nitrates and nitrites in cured meat products must comply with the provisions set out in Directive 2006/52/EC which amends Directive 95/2/EC on additives other than colours and sweeteners. This Directive is transposed into Irish legislation by S.I. No. 40 of 2008.

S.I No 40 of 2008.pdf
EC Directive 2006 52.pdf

All sampling referred to in this document that is intended for official control purposes should only be carried out by an authorised officer and should only be undertaken under requisition from, or by arrangement with, the public analyst laboratories (PALs) in Dublin, Cork or Galway, or the Central Meat Control Laboratory (CMCL). Local authority samples should be sent to the PALs and Dept of Agriculture, Fisheries and Food (DAFF) samples to CMCL.
Surveillance and monitoring of food additives
Surveillance of food additives

Article 27 of Regulation 1333/2008/EC requires Member States to monitor the consumption and use of food additives on a risk-based approach and to report their findings regularly to the Commission.

This monitoring obligation was already in place under Directives 94/35/EC, 94/36/EC and 95/2/EC.

This includes:

- Monitoring of levels of additives in food on the Irish market.
- Surveillance of food for use of non-permitted additives
- Involves sampling of food and analysis of selected additives
Sampling of food to determine additive levels

- Primarily undertaken by Environmental Health Officers throughout Ireland (also DAFF / LAVS / SFPA)

- Mainly retail samples (some enforcement activity at production level – particular exceptions)

- FSAI carries out some targeted surveys, e.g. Sweeteners and colours
Analysis of additives in food

- Public Analysts Service

- 3 Public Analysts Laboratories (Dublin, Cork and Galway)

- National sampling plan developed with HSE

- Method development for additives not previously analysed (e.g. Aluminium in bakery wares, natural colours such as annatto, bixin, norbixin)
National Chemical Surveillance programme

- Approximately 10,000 food items per year
- 1/3 of these for food additives
- FSAI sets priorities based on risk assessment and EC activities
Prioritisation of sampling

- Each year FSAI produces list of priorities (wish list) for chemical analysis

- Based on number of factors
  - Compliance with legislation
  - Specific enforcement issues
  - Monitoring of presence of specific substances (Cion WG)
  - Collection of data for exposure assessments (EFSA)
  - It’s risk based (but risk means many things)
Priority Setting

- Report from the Commission on Dietary Food Additive Intake in the EU (2001)
  - Further exposure data needed on Tier 3 additives (for adults, more extensive list for children), including sulphites, nitrites, polysorbates, aluminium salts

- National priorities and Rapid Alerts
Rapid Alerts and EFSA requests

- Sudan Red and other illegal dyes
- Aluminium as a food additive
  - Bakery wares
- AZO colours
2010 Programme

SULPHITES

- Crustaceans including prawns, shrimp, and crab
- Sausages and burgers (pre-packaged and sold loose)
- Wine
- Dried fruit (including apricots)
- Vac-packed potatoes

- Compliance with maximum levels (also needs to be labelled as an allergen)
- Review by EFSA – need actual levels (Tier 3 additive)
2010 Programme

NITRATES /NITRITES (as additives)

- Focus on cured meat products
- Controls based on in-going amounts (Directive 2006/52/EC) except for specific derogated products
- Compliance with legislative limits for derogated products produced in butchers shops that are curing on-site only
- FSAI guidance on sampling published on website
2010 Programme

COLOURS

- Revisit 2005/06 survey of artificial colours in a range of foodstuffs
- Products such as confectionery, soft drinks, processed foods, snacks etc (350 samples)
- Lots of anecdotal evidence that artificial colours being removed
- From 20 July 2010 any product containing one or more of the Southampton colours had to be labelled to indicate they may have an adverse effect on activity and attention in children

ALSO

- Annatto, bixin and norbixin in cheeses, yellow fat spreads, smoked fish, snacks etc
2010 Programme

POLYPHOSPHATES
- Meat products, fish and seafood, drinks and deserts

BENZOATES AND SORBATES
- Non-alcoholic drinks and other foods

ALUMINIUM-CONTAINING ADDITIVES
- Products where Al containing additives declared on label (e.g. bakery wares, sugar confectionery, crystallized fruit)

*EFSA opinion on total Al – additive use significant contributor*

BHA, BHT and TBHQ
- Fats and oils

FLAVOURINGS
- Coumarin in bakery wares containing cinnamon
And finally: Ad-hoc surveys by FSAI

An Investigation into the Compliance of Sausages and Burgers available in Ireland with Regulation 884/2007/EC which suspended the use of Red 2G (E128) as a Food Colour

July 2008

The results presented in this report relate solely to the individual samples/batches tested and do not necessarily reflect the general status of the products listed.
Outcome of enforcement activities on food additives in Ireland

- **High degree of compliance with maximum permitted levels and labelling**

  Some recurring issues e.g. high nitrate/nitrite levels in Irish bacon and ham products
  NEW guidance document recently published by FSAI for enforcement authorities to help in this area.

- **Surveillance of food for use of non-permitted additives can be challenging**

- **Resource implications so targeted approach**