

Health & Social Services Committee

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Date: Wednesday 22 June 2005

Venue: Committee Room 2, National Assembly for Wales

Title: Colours in Food

Purpose

This paper is for information only. It has been prepared in response to the request from a Committee Member for information about laboratory capacity in the UK to test food and food products for the presence of Sudan I – IV, Para Red and other industrial dyes not authorised for use in food.

Summary / Recommendations

The paper describes the current arrangements for controlling, sampling and testing of foods and ingredients imported into the UK to protect consumers against exposure to these dyes. It specifically describes the methodology, and capacity, for testing in laboratories.

Background

European Commission Decision (2003/460) **(a)** published on 20 June 2003 prohibited all imports of chilli powder, into EU Member States unless accompanied by an analytical report which demonstrates that each consignment did not contain Sudan I. A further Decision (2004/92/EC) **(b)** published on 21 January 2004 (and which came into force in the UK on 27 January), extended these measures to require that cargoes of chilli and curry powders coming into any EU Member State be accompanied by a certificate showing they have been tested and found to be free of Sudan I, II, III and IV. These dyes are considered to be genotoxic carcinogens and their presence in foods is unacceptable.

In the absence of such certification the Decision requires consignments to be detained under official supervision until the importer has had the product tested and has provided an analytical report. If the consignment is found to be contaminated, or if the importer is not willing to have it tested, it has to be destroyed.

The Decision also contained provisions for random sampling and analysis of relevant products to be carried out at ports and airports, and for food authorities to carry out sampling and testing of products

already on the market. Over 1000 samples have been analysed each year in the UK since the measures were first introduced in 2003.

On 23 May 2005 a further Commission Decision was adopted. This requires that only original versions of analytical certificates can be accepted and that these must be endorsed by a representative of the competent authority in the exporting country. It also extends these requirements to include Curcuma (turmeric) and Palm Oil.

The standard method for detecting the presence of Sudan I-IV and other illegal dyes such as Para Red is by use of High Performance Liquid Chromatography (HPLC). All public analysts and most other laboratories in the UK should be able to carry out these tests. This method can detect the presence of these dyes down to very low concentrations – typically in the range 0.5 - 1 part per million (ppm). When products are tested and dye is found to be present, the product and foods manufactured using it are withdrawn from sale and consumers informed.

A very limited number of laboratories are also capable of testing using Liquid Chromatography – Mass Spectrometry (LC-MS). This method is reported to be more sensitive – the limit of detection is claimed to be of the order of 10 parts per billion.

Considerations:

Since the Committee meeting on 4 May the EU Standing Committee of the Food Chain and Animal Health met on 10 May and agreed to establish a working group, which will be co-ordinated by the UK, to further develop analytical methods for the detection of Sudan and other dyes. It was recognised that there was an urgent need for this work, given the different approaches to testing for illegal dyes used between laboratories and within Member States.

This work, which began immediately, is already showing that LC-MS methods for Sudan I and other related dyes are not available in many laboratories and there can be considerable variability in results between laboratories analysing the same samples. Concerns have also been raised that LC-MS methods can produce false positive results at low levels.

In the light of these developments, and until these issues are resolved by the Working Group, the Food Standards Agency has advised that the recommended method for detecting Sudan I and Para Red should be that based on HPLC. The limit of detection for this method was agreed by Member States at the 10 May meeting as being 0.5 – 1.0 mg/kg. The Agency will review its position in the light of further advice from the European Commission arising from the work initiated on 10 May.

Financial Implications

There are no financial implications from this information paper arising for the Assembly.

Action for Subject Committee

This paper is for noting.

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(a). Implemented in Wales by the Food (Hot Chilli and Hot Chilli Products) (Emergency Control) (Wales) Regulations 2003.

(b). Implemented in Wales by the Food (Hot Chilli and Hot Chilli Products) (Emergency Control) (Wales) (Amendment) Regulations 2004.