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Advisory Council on Food and Environmental Hygiene

Proposed Amendment to the Colouring Matter in Food Regulations

Purpose

This paper briefs Members of the proposed legislative amendment to the Colouring Matter in Food Regulations (Cap. 132H), in relation to the colouring matter of Red 2G.

Background

Existing Local Regulations

2. In Hong Kong, the use of colouring matter in food is regulated under the Colouring Matter in Food Regulations (Cap. 132H). No food intended for sale for human consumption shall contain any added colouring matter which is not a permitted colouring matter. Lists of permitted colouring matter, including coal tar colours and other colours, have been laid down in Part I and II of the First Schedule of the aforesaid Regulation respectively. Red 2G is currently a permitted colour listed under Part I of the Regulation.

Safety of Red 2G

3. Red 2G (International Numbering System\(^1\) (INS) 128), also known as CI Food Red 10 or azogeranine, is a synthetic dye commercially available as the sodium salt of the dye (water-soluble) or the aluminium lake (water-insoluble). Red 2G imparts light red colour, producing cherry to blood-red shades in foods. It has excellent stability to heat, light, acids and sulphur dioxide.

4. The Joint Food and Agriculture Organization / World Health Organization Expert Committee on Food Additives (JECFA)\(^2\) evaluated

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\(^1\) The International Numbering System (INS) for Food Additives has been prepared by the Codex Committee on Food Additives for the purpose of providing an agreed international numerical system for identifying food additives in ingredient lists as an alternative to the declaration of the specific name which is often lengthy and a complex chemical structure.

\(^2\) The Joint FAO/WHO Expert Committee on Food Additives (JECFA) is an international expert scientific committee that is administered jointly by the Food and Agriculture Organization (FAO) and
the safety of Red 2G and considered that the concentrations of the dye reaching the body tissues was likely to be very small and considerably lower than that required to induce mutations in bacterial studies. There was no evidence of carcinogenicity for Red 2G in animal studies. JECFA in 1981 allocated an Acceptable Daily Intake\(^3\) (ADI) of 0-0.1 mg/kg body weight to it.

**Recent Development: European Food Safety Authority (ESFA)**

5. Aniline, the metabolite of Red 2G, has in the past decade raised safety concern, and the European Food Safety Authority (EFSA) has recently re-evaluated the food colour Red 2G, based on the animal data published since 1999. In July 2007, ESFA concluded that aniline caused gene damages in experimental animals; and based on similar metabolism of aniline in animals and humans, carcinogenic risk for man cannot be excluded. EFSA then decided that it was prudent to regard Red 2G as being of safety concern. A regulation to withdraw the ADI for Red 2G previously established by the European Commission (EC), and to suspend the use of Red 2G, was subsequently adopted by the EC on 26 July 2007, which came into force on 28 July 2007.

**International Situation**

6. The Codex Alimentarius Commission (Codex) has not yet established any food safety standard for Red 2G. The Codex Committee on Food Additives has been discussing the maximum levels of Red 2G in some food (currently at step 6). Red 2G is not a permitted colouring matter in food in places including Australia, Canada, the Mainland, Japan, Singapore and the USA. After the suspended use of Red 2G in the European Community, we are not aware of any places other than Hong Kong that permit the use of Red 2G in food. The new European regulation permits food containing Red 2G placed on the market before 28 July 2007, which complies with previous EU legislation, to be marketed until their “use by” date or date of minimum durability.

**Local situation**

the World Health Organization (WHO) of the United Nations. It has been meeting since 1956, initially to evaluate the safety of food additives. Its work now also includes the evaluation of contaminants, naturally occurring toxicants and residues of veterinary drugs in food.

\(^3\) Acceptable Daily Intake (ADI) is an estimate of the amount of a substance in food or drinking water, expressed on a body-weight basis, that can be ingested daily over a lifetime without appreciable risk.
7. In 2006, Red 2G was detected in 22 out of 2404 samples (<1%) tested for the colour under the routine food surveillance programme operated by the Centre for Food Safety (CFS). Relevant samples were: Chinese birthday bun (壽包) (7 samples), soya bean sauce (海鮮醬) (5 samples), jelly (啫喱) (4 samples), Chinese New Year pudding (年糕) (2 samples), chili sauce (辣醬) (1 sample), red vinegar (紅醋) (1 sample), Chinese style preserved sausage (臘腸) (1 sample) and beef jerky (牛肉乾) (1 sample).

8. In addition, a survey conducted by the Consumer Council in 2004 found that Red 2G was detected in some vegetarian food (齋鹵味) samples. The proposal to remove Red 2G from the permitted list of colours was discussed at the Trade Consultation Forum organised by the CFS on 19 September 2007, and no trade representatives reported/were aware of the use of Red 2G as colouring matter in their products.

**Proposed Amendment**

9. In view of the latest scientific evidence, international situation, and the availability of other choices of red food colours, it is proposed to remove Red 2G from the list of permitted colouring matters under the Colouring Matter in Food Regulations as a precautionary measure. This proposal is supported by the Expert Committee on Food Safety.

10. Even though EFSA raised food safety concern about the use of Red 2G in food, available evidence does not indicate any immediate health risk upon consumption of Red 2G containing food. To allow sufficient time for the trade to comply with the proposed legislative amendment, a grace period of reasonable duration is recommended. Upon commencement of the proposed amendment regulations, Red 2G should not be present in food.

**The Way Forward**

11. The Administration will consult the Legislative Council Panel on Food Safety and Environmental Hygiene on the proposed legislative amendment. The trade will also be advised to replace Red 2G in their products and relevant stakeholders will be consulted as appropriate.

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Advice Sought

12. Members are invited to note and comment on the proposed amendment to the Colouring Matter in Food Regulations.

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