Minutes’ statement of the Scientific Committee on Food on Food Irradiation

(expressed on 5 March 2003 at its 136th Plenary meeting, corresponding to item 10.2 of the agenda)

10. Novel foods and novel processes

10.2. Food irradiation

The Committee has been asked by the Commission to review its Opinion on the Irradiation of Food of 1986, in the light of new developments.

Since the Joint FAO/IAEA/WHO Report of 1981 on The Wholesomeness of Irradiated Food and the 1986 Report of the Scientific Committee on Food on the Irradiation of Food, as well as the adoption in 1983 of the Codex General Standard for Irradiated Foods and in 1984 of the Recommended International Code of Practice for the Operation of Radiation Facilities used for the Treatment of Food, only a limited number of studies have been carried out in this field. The toxicological and nutritional database relating to foods irradiated with doses below 10 kGy has not been enlarged to any significant degree while the human clinical studies, although they did not show any adverse effects following the consumption of irradiated foods, are not specific enough to support a general extension of doses up to 10 kGy to any foodstuff, except for dried herbs and spices, which for technological reasons might need up to 30 kGy. The Committee considered it not possible at present to deviate from its earlier position that only those specific doses and food classes should be endorsed for which adequate toxicological, nutritional, microbiological and technical data are available.

With respect to high dose irradiation a Joint FAO/IAEA/WHO Study Group published a review in 1999 of all data on the irradiation of foods with doses above 10 kGy to determine whether such foods could be considered wholesome. Again only very limited toxicological studies have been carried out with high dose irradiated foods and none has been provided on any of the convenience foods that have been deep frozen and then irradiated with high doses. As the database for high-dose irradiated foods has only been slightly extended it is not possible for the Committee to recommend a general removal of the upper limit of 10 kGy for the production of safe and wholesome foods.

The Committee intends to express a full opinion on this subject at the Plenary meeting in April.