



INSTITUTE  
OF BIOLOGY

## **A response to the Government Office for Science review of the use of science in the Food Standards Agency**

May 2008

### **Summary**

The Institute of Biology (IOB) welcomes this review of science in the Food Standards Agency (FSA) as highlighting the key contribution of science to the development of advice and policy on food matters. In particular we wish to underline the vital role of top-quality biological, biochemical, biophysical and environmental information in reaching decisions which have consequences for society as a whole.

The IOB wishes to see the clear impartial scientific expertise of the FSA used to support the public need for whole food-chain information. This could inform consumer choice and constrain poor practices by producers and distributors as well as helping to combat food shortages and reaching national climate change targets.

We would welcome clear communication and guidance to constrain the growing problem of food waste and the separation of 'quality' and 'safety' concepts in labeling.

IOB supports the provision of relevant nutritional information for catered food, which represents an increasing proportion of the national diet, and action to ensure the quality of food delivered to people without choice e.g. in hospitals, care homes, schools, prisons etc.

We consider the retention of core facilities for the detection and combating of incidents of food contamination and adulteration to be a high priority.

## **Appendix 1**

### **A.**

#### **Relating to consultation questions of horizon scanning**

As pressures on food security grow, consumers need to be aware of all preceding food-chain issues in order to make informed choices and fully participate in the evolution of this important market. The Institute of Biology wishes to highlight the importance of promoting, scrutinizing and explaining scientific measures to increase food productivity in a sustainable manner. In order to achieve this account must be taken of the energy output as food in terms of the direct energy input (/kW; excluding solar); input of fertilizer (/kg and /kW equivalent); man hours and the land use (/km<sup>2</sup>) as well as the energy costs of storage and transport as part of a system-wide assessment. We recognise that the provision of benefits beyond energy must also factor in FSA assessments and recommendations but we wish to stress the increasing importance of the energy balance in food policy issues.

It should be a priority to ensure that harvest and distribution conditions minimize spoilage between source and shop. In aim to achieve this, minimization of energy cost and greenhouse gas emissions should be a parallel priorities in terms of refrigeration, transport and application of fungicides etc. The need to recognise the contribution to greenhouse gas production by the livestock industry has already been recognized for some time.<sup>1</sup>

Consumer wastage could also be addressed by expansion and communication of the science and sense behind labels such as 'Sell by', 'Best by' and 'Use by,' as well as working with industry and retailers to ensure their proper usage. This is particularly important to combat unnecessary use of these designations. It is important to separate concepts of 'quality' and 'safety' in people's minds with regard to such messages and we do not believe that this has yet been achieved. Significant sections of the public remain unfamiliar with the sources and processing of their food.

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<sup>1</sup> [http://www.virtualcentre.org/en/library/key\\_pub/longshad/A0701E00.htm](http://www.virtualcentre.org/en/library/key_pub/longshad/A0701E00.htm)

Food wastage and the associated loss of energy input and value to the consumer is a particular problem in this country. It is estimated that *each day* 1.3 million unopened yoghurts, 440,000 ready meals and 5,500 whole chickens are thrown away in the UK.<sup>2</sup> Allied to the economic value of these wasted resources there is the cost to local authorities of their disposal and the cost to the environment of their production and transport. Consideration of the carbon impact of food waste also underlines this as a costly activity which if halted would provide the same benefit in carbon emissions as removing one fifth of cars from UK roads.<sup>3</sup>

Another area of concern is the transparency of the catering and processing industry. According to the FSA's own assessment men consume a quarter, and women one fifth, of food calories outside the home.<sup>4</sup> Scientifically informed labeling of catered food would enable consumers to assess this dietary intake. In light of recent findings that the obese people consume 18% more calories<sup>5</sup> than others, we believe that provision of this kind of information and education is urgently required to combat a growing health problem.

Similarly food for people without choice *e.g.* hospitals and care homes, schools and prisons should be assessed for suitability by FSA scientists. We note that the Westminster Food and Nutrition Forum will shortly consider the provision of food in hospitals.

## **B.**

### **Relating to consultation questions of commissioning and quality control**

We welcome the development of the FSA as an intelligent customer of science and advice, and note their interest in Continuing Professional Development (CPD) schemes. IOB is fully committed to the value of such programmes for its members. In order to expand the knowledge and experience base of the organization IOB recommends that the FSA continue the practice of employing externally where appropriate.

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<sup>2</sup> [http://www.wrap.org.uk/wrap\\_corporate/news/wasted\\_food\\_now.html](http://www.wrap.org.uk/wrap_corporate/news/wasted_food_now.html)

<sup>3</sup> [http://www.wrap.org.uk/wrap\\_corporate/news/wasted\\_food\\_now.html](http://www.wrap.org.uk/wrap_corporate/news/wasted_food_now.html)

<sup>4</sup> <http://www.food.gov.uk/healthiereating/healthycatering/cateringbusiness/>

<sup>5</sup> <http://news.bbc.co.uk/1/hi/health/7404268.stm>

**C.**

**Relating to consultation questions on publication practice**

The IOB wishes to commend the FSA's current publication policy which does not restrict publication of findings by its researchers and collaborators.

**D.**

**Relating to consultation questions on knowledge sharing and transfer**

The IOB welcomes the contribution of the FSA's chief scientists' blog to the communication of information in an accessible and engaging manner.

**E.**

**Relating to consultation questions on capacity and capability**

The FSA must ensure appropriate national resources to deliver rapid and effective diagnosis and response to incidents of disease-causing organisms (e.g. *E.coli*) or chemical contamination (or adulteration) so that these can be identified rapidly. Sites capable of delivering these capacities should be identified and supported/protected.

**Institute of Biology**

The Institute of Biology (IOB) is an independent and charitable body charged by Royal Charter to further the study and application of the UK's biology and allied biosciences. We have 14,000 members and many specialist learned Affiliated Societies. We are a member of the Biosciences Federation, established in 2002 to represent the UK's biological expertise.

**Openness**

The Institute of Biology is pleased for this response to be publicly available and will be placing a version on [www.iob.org](http://www.iob.org) shortly. For any queries regarding this response please contact Dr Laura Bellingan, Institute of Biology, 9 Red Lion Court, London, EC4A 3EF, email: [l.bellingan@iob.org](mailto:l.bellingan@iob.org)

## *Affiliated Societies represented by the Institute of Biology*

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Association for Radiation Research  
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Association of Clinical Embryologists  
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Association of Veterinary Teaching and Research Work  
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British Inflammation Research Association  
British Lichen Society  
British Marine Life Study Society  
British Microcirculation Society  
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