

Scientific Advisory Committee on Nutrition

Paper for Information: Food Standards Agency Low Income Diet and Nutrition Survey

Agenda Item 9

Please see attached paper for information. The following annexes are also attached:

Annex 1 Consultation and procurement

Annex 2 Aims of the Low Income Diet and Nutrition Survey

If you would like a copy of the LIDNS specifications, please contact the Secretariat at the Food Standards Agency

Scientific Advisory Committee on Nutrition

Food Standards Agency Low Income Diet and Nutrition Survey

Introduction

1. The Food Standards Agency has commissioned a diet and nutrition survey of low-income consumers. The purpose of the survey is to provide robust baseline data on food consumption, nutrient intake and nutritional status and factors affecting these in low-income/materially-deprived consumers. These data will contribute towards the development of effective policies to reduce inequalities and social deprivation.
2. The survey will include about 3,000 people, both adults and children, throughout the UK. It will collect detailed quantitative information on food consumption (by 4 x multiple pass 24-hour recall) and nutrient intake. Other components are physical measurements (e.g. height, weight, blood pressure), a blood sample for analysis of nutritional status indices, a detailed interview to collect information on socio-economic, demographic and lifestyle characteristics, and assessments of physical activity and oral health by questionnaire.
3. A feasibility study will be undertaken in late spring 2002, followed by mainstage fieldwork during 2003. We expect results to be published in Spring 2005.

Procurement and contract award

4. A summary of the consultation and procurement exercises is attached at Annex 1. The contract has been awarded to a consortium led by the National Centre for Social Research and including University College London, King's College London, Institute of Food Research, Royal Victoria Infirmary and the Rowett Research Institute.

Management

5. The survey is overseen by a Project Management Board chaired by the Food Standards Agency and comprising representatives of the Agency and each of the organisations in the consortium. For the first time in a survey of this kind, an independent expert has been invited to serve on the Project Board. In addition, others with an interest in the survey (e.g. Department of Health, Department for Work and Pensions, Sustain) are being kept informed of progress and their expertise has been utilised as preparations for the survey have progressed.

Scope of the survey

6. The aims of the survey are attached at Annex 2. The scope of the survey is given below. Further information (including the full specifications) can be provided on request.

Sample

- sample size 3000.
- sample coverage: England, Scotland (including Highlands and Islands), Wales, Northern Ireland, representative of UK 'low income population'.
- sample to include all ages from 2 years upwards.
- two people to be sampled per household (in households containing more than one person), either one adult and one child or two adults.
- Sampling method – doorstep address screening.

Components

- face to face interview covering background information on household; eating habits; social and domestic circumstances affecting diet e.g. food accessibility, cooking skills, expenditure; attitudes and barriers to healthy eating; food security; food deprivation; health; physical activity; oral health.
- self completion restraint questionnaire to assess attitudes to eating in order to try to help identify mis-reporters.
- 24-hour recalls on 4 non-consecutive days (including weekends and selected to reflect benefit cycles) in order to assess food consumption and nutrient intake.
- physical measurements: weight, height (all ages); mid-upper arm circumference (age 2-15 years); waist and hip circumferences (age 11 years and above; blood pressure (age 4 years and above)
- blood sampling in subjects aged 4 years and above.
- analysis of a range of analytes in blood.

Feasibility study

- sample size 200 people, covering whole UK
- doubly labelled water study in 70 subjects to validate dietary methodology.

7. As well as providing robust baseline data on materially deprived consumers, the focus of this survey is towards the provision of information that will help target policies in this area. Thus, the survey will collect information on, for example:
- Access (shops and cooking/preparation/storage facilities) and affordability of a healthy diet
 - Knowledge and skills (cooking and shopping)
 - Knowledge, attitudes, and behaviours (food, healthy eating/diet)_
8. The survey has also been designed to take the needs of this population group into account, including reduction of respondent burden. For example, it was decided not to attempt collection of a 24-hour urine sample.

Sample selection

9. Wards in each country will be divided into two strata. The first stratum will consist of the 20% of wards in that country that are the most deprived in terms of an area deprivation indicator, and the second stratum will consist of all the other wards in the country. The contractor estimates that about 40% of deprived *households* live in areas covered by the first stratum.
10. The design then involves differential sampling between the two area strata, with areas in the first stratum being given a higher selection probability than areas in the second stratum. The effect of this will be to improve the efficiency of address-screening, while still allowing low income/deprived households in non-deprived areas a chance of selection. Results representative of the UK or any country or region can then be obtained by applying weights that compensate for the different probabilities of selection.
11. The survey will focus on both low income and material deprivation. Households will initially be 'screened in' using a short doorstep screening questionnaire comprising easy-to-answer questions about a number of indicators of deprivation (e.g. nature of accommodation and number of occupants; use of car or van; employment status; receipt of benefits). In combination, these identify materially deprived households with a high degree of reliability. If, when fuller information becomes available in the home, it becomes apparent that screened-in households do not meet the deprivation criterion, they can be screened-out.

Dietary methodology

12. In the NDNS, information on food consumption has been collected using a weighed dietary record, which is seen to be the best method, in terms of precision and detail, to support Government policy. However, there are concerns about the suitability of this method for a survey of low income consumers because of, for example, literacy and numeracy problems, respondent burden, and the wish to obtain information on more than one person in each household.
13. Possible alternative methods were tested in a research project undertaken by Kings College London. Based on this research, repeat (4 times) 24-hour recall, multiple-pass method (similar to that used in the United States for their national food consumption survey) was chosen. This provides detailed information on food types and portion sizes and prompts for foods that are known to be easily missed (e.g. alcoholic drinks, confectionery).

Progress

14. The development of protocols, fieldwork documents and questionnaires to be used in the feasibility study is underway and an application for ethical clearance has

been submitted. The feasibility study is due to take place in May/June. Main stage fieldwork is due to commence in January 2003 and the results should be available from the study in 2005.

**Diet and Nutrition Surveys Branch
Food Standards Agency
March 2002**

Annex 1**Consultation and procurement**

The Agency consulted interested parties on the scope of the study, prior to the development of the specifications for the procurement exercise. For example, a meeting of academics and others (including a consumer organisation and a health authority with low income projects underway) was held in July 2001. Other Government departments with an interest were also consulted at this stage.

Invitations for expressions of interest were invited at the end of August 2001, through the New Scientist, the Nutrition Society, and personal communication. Six expressions of interest were received. These were evaluated for technical and administrative competence and, at the beginning of October, three organisations were invited to negotiate. A briefing meeting for those invited to tender and other interested parties was held in mid-October. The purpose of this meeting was to clarify any points that the invitees had on the specifications and to introduce those invited to tender to other experts whose input that might strengthen their applications including those bodies/experts that had not been asked to tender in their own right. Outline proposals with indicative costings were received at the end of October. These proposals were appraised by a core team comprising two FSA officials plus two independent experts. In addition, specialist evaluations were obtained on statistical, medical and blood analysis aspects from Agency and external specialists.

Negotiation meetings were held with all tendering organisations during November to discuss and clarify issues raised by the outline bids. They were then invited to submit best and final offers, which were appraised by the same core team, prior to recommendations being submitted to the Project Management Board.

Annex 2**Aims of the Low Income Diet and Nutrition Survey**

The LIDNS is intended to:

- provide detailed quantitative information on the food and nutrient intakes, sources of nutrients and nutritional status of low-income groups, in relation to their socio-economic and deprivation status, as a basis for Government policy;
- describe the characteristics of individuals with intakes of specific nutrients that are above and below the national average;
- measure blood indices that give evidence of nutritional status or dietary biomarkers and to relate these to dietary, physiological and social data;
- provide height, weight and other measurements of body size on a representative sample of low-income individuals and examine their relationship to social, dietary, health and anthropometric data as well as data from blood analyses;
- assess the diets of low-income consumers to establish the extent to which they are adequately nutritious and varied;
- monitor the extent of deviation of the diet of low-income consumers from that recommended by independent experts as optimum for health, in order to inform policy development;
- provide information on the relationship between dietary intake and nutritional status and factors affecting food choice in low income groups (e.g. perceived food security status, access to and availability of food, attitudes to diet);
- help determine possible relationships between diet and nutritional status and risk factors in later life;
- assess physical activity levels of the population under study; and
- provide basic information on oral health status in relation to dietary intake and nutritional status.