FNM News

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1995 National Nutrition Survey underway

Data collection in the largest and most comprehensive food and nutrition survey of the Australian population ever undertaken started in February 1995 and will continue until March 1996.

The survey is being conducted by the Australian Bureau of Statistics (ABS) on behalf of the Commonwealth Department of Human Services and Health (DHSH), as a voluntary survey under the statistics legislation. Data collection for the National Nutrition Survey (NNS) is being carried out by a team of twenty-five nutritionists, all of whom have received intensive training in the survey procedures. It is expected that results from the survey will become available progressively from late 1996.

The survey will provide, for the first time, information on food and nutrient intakes, dietary habits and body measurements of a representative sample of Australians, aged from two years. In addition the data from the NNS will be able to be linked to data from the National Health Survey on socioeconomic status, health status and use of health services .

The NNS will provide landmark baseline data for many population subgroups including young adults, older people and rural Australians. It will also provide trend data for comparison with the 1983 National Dietary Survey of Adults and the 1985 National Dietary Survey of Schoolchildren.

For further information contact Barbara Brown, Director NNS, c/- DHSH (ph. 06 289 8087) or Michael de Mamiel, Director NNS, c/- ABS (ph. 06 252 5486).

For additional copies of *FNM News*, or for inclusion on the mailing list, please contact Ian Lester by telephone on (06) 243 4024, or by fax on (06) 257 1470.

Update: key indicators for Monitoring

The Nutrition Monitoring Unit has prepared a discussion paper titled *Development of key indicators for food and nutrition monitoring: indicators relating to food intake and food habits.*

The main purpose of this paper is to promote discussion about the development and adoption of standard questionnaire instruments for monitoring food intake and food habits at national, regional and local level.

At this stage, only a limited number of copies of the 48-page paper have been sent for comment to nutritionists with a major role or a special interest in monitoring or questionnaire design.

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However, the Nutrition Monitoring Unit is seeking further input. If you have experience, responsibility, or a particular interest in this area, and are willing to give some time and thought to the development and evaluation of questionnaire-based key indicators for monitoring food intake and food habits, please contact the Nutrition Monitoring Unit for a copy of this paper.

The discussion paper is accompanied by a short questionnaire which asks individuals to consider not only priorities for indicators, but also to comment on their preference for, or experience with, different survey instruments. The conduct of the National Nutrition Survey in 1995 provides a unique opportunity to compare and evaluate food intake related instruments in current use. An example of this is the comparison for a particular population of estimates of fruit and vegetable intake based on simple frequency data with the more detailed information on fruit and vegetable intake that will become available from the 1995 National Nutrition Survey.

Survey news

National Aboriginal and Torres Strait Islander survey: detailed findings

The first publication of the results of the National Aboriginal and Torres Strait Islander Survey 1994 was launched in Canberra on 21 February. *National Aboriginal and Torres Strait Islander survey: detailed findings* (ABS cat. no. 4190.0) presents the initial results from the first nationwide survey of Aboriginal and Torres Strait Islander people.

The survey was conducted from April to July 1994. Its purpose is to provide the Commonwealth Government, State and Territory

Governments and Aboriginal and Torres Strait Islander people with the most-needed statistics in a range of social, demographic, health and economic areas. The statistics in this publication represent a selection of those available, with further information available on request. An Australian summary and regional overviews for each of the 35 ATSIC Regions and the Torres Strait area have also been produced.

Further publications are being planned for release through 1995 and 1996.

Consumer trends in Australia—update

In the November newsletter we reported briefly on the 1994 Australian Supermarket Institute survey on shopping trends in Australia. As part of the National Food and Nutrition Monitoring Program, the 1994 survey included a small number of additional questions to enable the results to be categorised by the ABS Index of Relative Social Disadvantage (IRSD) and by body mass index. Some of the findings based on this additional information are outlined below.

- Although the survey sample was selected to be a 'nationwide cross-section of shoppers', it was in fact a capital city sample as less than 5% of the sample were resident outside these areas.
- A higher than expected proportion (33% compared with 20%) of the sample also lived in areas classified in the top (high socioeconomic status) quintile of the ABS Index of Relative Social Disadvantage (IRSD).
- Households from areas classified in the top quintile of the IRSD spent, on average, about 20% more on food per week than those resident in areas classified in the two lowest quintiles. Average household size was 3.4 to 3.1 respectively.
- Based on self-reported weight and height, 69% of the sample had a body mass index of 25 or less. The equivalent population based estimate from the 1989–90 National Health Survey was 64%.
- Seventy-one per cent of the sample classified themselves correctly in terms of under-weight, acceptable weight or overweight, and less than 1% grossly misclassified themselves.
- As reported in the November *FNM News*, younger shoppers were more likely to state that their diet could be a lot, or at least somewhat, healthier. A similar trend was observed with increasing body mass index, but this trend was significant only for those less than 45 years of age.
- Shoppers with a body mass index of 25 or less, those with some post-secondary education, and those from areas with a higher IRSD were all more likely to be concerned about the nutritional content of their food.
- Following a low fat or other special diet plan, however, was not related to level of education, body mass index or IRSD.
- Shoppers with some post-secondary education were more likely to provide multiple responses to the question 'What if anything are you eating more/less of to ensure that your diet is healthy?'
- Those who reported eating more fruits and vegetables (67% of the sample) were more likely to be younger and to have some post-secondary education. There was no relationship with IRSD or body mass index.

Apparent consumption 1992–93

Annual release more timely

Apparent consumption of foodstuffs and nutrients Australia 1992–93 will shortly become available from the Australian Bureau of Statistics (cat. no. 4306.0). A change in the method of processing the data will result in the release of this publication 3 months early, relative to the previous issue. ABS reports that 'we aim to keep reducing the time between collecting and reporting on apparent consumption'.

Revised data from 1987–88 to 1991–92

This year's issue includes revised data for the years 1987–88 to 1991–92 which take into account revised nutrient data for dairy foods and new estimates for home production, based on the results of the survey *Home production of selected foodstuffs, year ending April 1992.*

The revised dairy foods nutrient data affect estimates of the vitamin A supply and the calcium supply. Retinol equivalents from the dairy foods group increased by 25% and total available retinol equivalents by close to a 3%. The revised nutrient data for calcium effectively lower the contribution of the dairy group by 2.4% and the total calcium supply by 1.2%.

Both changes are small, but since the calcium supply is already marginal relative to current recommendations for intakes, this change has greater nutritional significance.

The new estimates of home production affect data for fruit, vegetables, eggs, poultry, seafood, nuts and alcoholic beverages. The estimates include home production of eggs (14% of commercial production), nuts (10%), and molluscs and crustacea (11%), for which no allowance had been made previously. All had relatively small effects on the nutrient estimates because they make only a small contribution to the food supply.

The same applies to fish, for which the estimated contribution from non-commercial or recreational fishing is increased from 10% to 18% of the commercial catch. The cumulative differences in nutrient estimates arising from these foods are small.

Some of the new home production estimates for fruit and vegetables are individually quite large, but they tend to cancel out. For example, for 1991–92 the estimated home

production of oranges was reduced from 5% to 2% of commercial production (from 24 000 tonnes to 9 500 tonnes), but the estimate for other citrus fruits rose from 5% to 20% (from 5 500 tonnes to 21 700 tonnes). Although these are big changes, in nutrient terms this meant that a decrease of 0.75 mg/day of vitamin C in the contribution of oranges was offset by an increase of 0.83 mg/day from other citrus fruits.

The allowance for home production of other fresh fruit has changed from a nominal 15 000 tonnes per year to 7% of commercial production (78 050 tonnes in 1991–92).

Changes in vegetables include lower estimates for potatoes, carrots and onions and increased estimates for cucumbers, pumpkins, zucchinis and squashes.

The overall effect of the revised fruit and vegetable data on the nutrient supply is a marginal increase in the total energy, vitamin C and β-carotene supply.

Trends

Some interesting findings for 1992–93 were:

- a levelling off of the decline in the energy contribution of beer, but a continued fall in energy contribution of the alcoholic beverages group to 4.8% total energy;
- increase in the carbohydrate supply at the expense of both fat and protein since 1991–92; and
- decreases in the supply of all micronutrients calculated since 1991–92. The largest decrease was a 6% fall in the iron supply, to 12.7 mg/day.

For more information about apparent consumption, contact Selena Biggs at ABS on 06 252 5300.

Second International Conference on Dietary Assessment Methods—meeting highlights

In 1992 a small group of enthusiasts based at the University of Minnesota, in collaboration with the World Health Organization and the Food and Agriculture Organization of the United Nations, organised the first International Conference on Dietary Assessment Methods (ICDAM) held in St Paul, Minnesota, in September that year. This inaugural meeting was so successful that plans were made immediately for a second conference. The second ICDAM, held in Boston, USA from 22 to 24 January 1995, attracted more than 500 delegates from all around the world, including seven from Australia. The conference program was preceded by a number of workshops related to the main conference themes, and a concurrent poster session. These provided a foretaste of the frustration I was to feel throughout the remaining two days of the meeting, at having to choose not only between concurrent conference sessions but also between conference and poster sessions! After travelling literally to the other side of the world, an extra day would have made an enormous difference to my ability to make the most of attending this meeting.

The conference proper began on Monday morning. The opening presentations were followed by the highlight of the meeting: a keynote address by George Beaton on 'Errors in the interpretation of dietary assessments'. George Beaton has maintained for some time that the future in dietary methodology lies not so much in major improvements in the dietary methods themselves, but in improved estimation and understanding of the associated errors and in the development of analytical and statistical methods of coping with them. For anyone who is not familiar with Beaton's work, his contribution to the first ICDAM, published in the January 1994 Supplement to the *American Journal of Clinical Nutrition* (59 (suppl): 253S–261S) is highly recommended.

The conference keynote address was followed by a session entitled 'New developments in dietary assessment'. This included presentations on developments in the administration and application of food frequency questionnaires for use with children and adolescents, minority populations and in multicentre studies, as well as updates on the various validation studies undertaken as part of the European Prospective Investigation on Cancer (EPIC) study. The session concluded with a short demonstration of the use of multiple overhead transparencies as a simple and effective aid to the estimation of portion size.

The afternoon plenary session focused on cognitive influences in dietary assessment methodology, i.e. how individuals remember what they have eaten. Visual imagery, food preferences, smell/taste imagery and usual practice are strategies frequently reported by children, and could provide useful cues in recall situations. The most important message from this session, for those whose interest lies in food frequency questionnaires, was that individuals are generally good at estimating the relative frequency of foods they consume but poor at estimating their absolute frequency of consumption. To overcome this problem we need to devise ways of calibrating people to response scales.

The day ended with a choice between concurrent sessions on 'Experiences with dietary methods in different cultures' and 'Statistical methods for calibration/validation studies', or perusal of the 80 or more

posters on display that afternoon. Somewhat foolishly opting for the statistical session rather than a gentle stroll round the posters, I suffered the inevitable consequence of information overload and have almost complete amnesia of the proceedings during this session.

After an expensive but meagre 'macrobiotic' conference dinner at the Kennedy Library and a good night's sleep, I was undaunted by Tuesday's program. The first plenary session focused on various aspects of food composition data, from the development of international databases on food composition to the use of such data in exposure assessment. This session also included a presentation on the large range of secondary metabolites produced by plants and provided a salutary reminder, to those interested in the relationships between diet and disease, that the nutrient components of food constitute only a small fraction of all the biologically active compounds which they contain.

The next session on 'Surveillance and monitoring' included a discussion of some research issues related to the data from NHANES III, a description of approaches developed for regional and local dietary surveillance, and an evaluation of a self-administered dietary questionnaire developed for use in a low literacy multi-ethnic population. The NHANES presentation focused mainly on the characteristics associated with 'under-reporting'. From the NHANES data the best predictors were found to be the number of foods reported, age, weight status, trying to lose weight, and smoking status. The presentation on regional and local dietary surveillance argued that the main purpose of a surveillance system is to collect data in order to do something about the situation, and not simply for monitoring longer-term trends. It would have struck a chord with those here in Australia who believe that national surveys do little to meet the need for local data because they lack local representativeness and timeliness, and include only limited measures of behavioural determinants. Although the Behavioural Risk Factor Surveillance System has been in operation in the USA since 1984, it is only since 1990 that a module of dietary questions was available as an additional option. A six-question fruit and vegetable module was used for the first time in all States in 1994. (Note that questions on core cereal, fruit and vegetable consumption based on this module are being trialed in the Autumn 1995 SA Omnibus Survey, and hopefully the next issue of *FNM News* will include a report from this survey.) The use of supermarket sales data was also briefly mentioned as an option for local surveillance, but at this stage, while feasible for a limited range of products, it is not considered to be sufficiently cost-effective for general use.

The final afternoon of the conference program provided a choice between three concurrent sessions, or a quick jog round another 100 posters! The sessions were 'Development and application of culturally sensitive methods for diet assessment', 'Biomarkers of dietary intake', and 'Food consumption patterns'. This last one included two interesting presentations on ways in which data from national surveys can be used to assess progress towards national dietary goals and targets, and the extent of compliance with dietary guidelines expressed in terms of servings of core food groups.

Recent American data, based on three-day averages adjusted for energy intake, found that compliance with recommendations was 57% for vegetables (3–5 servings recommended including potatoes), 34% for cereals (6–11 servings), and only 28% for fruit (2–4 servings). Less than 1% of men and women met all recommendations including those for dairy and meat consumption!

These results are not unlike those of our own 1983 National Dietary Survey in which, on average, the proportions of adults who met current recommendations for vegetable, cereal and fruit consumption were 40, 26 and 20% respectively. All three recommendations were met by only 4% of men and 1% of women.

The 3rd ICDAM is to be held in the Netherlands early in 1998. If you would like your name to be placed on the mailing list for information about this meeting, or if you have any ideas for topics which you would like to see discussed at the next conference, contact Ingrid Coles-Rutishauser, c/- Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601 or fax (06) 247 1570.

Ingrid Coles-Rutishauser

New publication

The core food groups: the scientific basis for developing nutrition education tools

This publication by Karen Cashel and Sue Jeffreson was endorsed by the NHMRC at its 117th session in June 1994. It is a thoroughly researched and competently presented resource that complements other relevant NHMRC nutrition initiatives, particularly the Dietary Guidelines for Australians and the Recommended Dietary Intakes for use in Australia.

Those involved in developing nutrition education resources or in other aspects of nutrition program development should read this book.

The core food groups: the scientific basis for developing nutrition education tools is available from AGPS for $11.95. Contact AGPS Mail Order Sales, GPO Box 84, Canberra ACT 2601, or Freecall 008 020 049.

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