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## Appendix 1: Consultations with users of nutrition data in NSW

### **Introduction**

The relevance and perceived importance of particular aspects of food and nutrition information in public health practice is a consideration when designing a food and nutrition monitoring system. In the United States, experience with state-level and community-based nutrition monitoring has shown that often, data are accumulated, but that improved access to data does not necessarily lead to the use of the information to improve decision-making of nutrition professionals (Pelletier et al 1994). The reasons for this are many but include a lack of relevance or perceived importance of the information to the priorities of practitioners, lack of interpretation and effective dissemination of the data, and limited knowledge and skills among practitioners about how to use data appropriately and effectively for the various purposes for which they are required. Hawe (1995) also argues that some types of information are more change-focussed and suggest intervention points, whereas other data simply re-state the problem.

### **Who was consulted ?**

We sought the views of potential users of food and nutrition information in NSW who are involved, to varying extents, in planning and implementing preventive nutrition programs and services. The types and numbers of personnel consulted were:

- Managers of selected divisions within the central office of the NSW Health Dept.(n=16);
- Health Promotion Directors (n=15);
- Community Nutritionists(n=15);
- Research and Evaluation Co-ordinators of health promotion (n=13);
- Nutrition academics (n=5);
- Nutrition-related Non-government organisations (n=6);
- Dietitians Association of Australia (NSW Executive)(n=3).

### **Objectives of consultations**

To identify, among selected public health professionals (users of nutrition data):

- their 'wish lists' for food and nutrition data;
- the importance they perceive in obtaining regular information about selected nutrition issues;
- how they use food and nutrition information; and
- how users of nutrition information would prefer to have data presented and supplied to them.

It was also hoped that the consultations would serve the additional purpose of allowing potential beneficiaries of the monitoring system to become involved in decisions about how the system would work, and thus be more likely to use and contribute to it, when developed.

The perceived importance by public health personnel of a nutrition issue is affected by many factors, such as:

- roles, responsibilities and current work priorities;
- knowledge about the absolute and relative public health significance of particular issues; and
- the availability of data about its prevalence and distribution.

Thus, the perceived ‘importance’ of an issue was not the only criteria for inclusion of an issue in the monitoring system. Other factors were also considered such as salience of a nutrition issue to current and likely future initiatives, and expert opinion about prevalent or severe nutrition-related conditions that have received little attention. The literature about nutrition issues of public health significance has been reviewed extensively in association with preparing the NSW Catalogue of Food and Nutrition (Stickney et al 1994) and this contributed to the final selection of issues to be monitored. The National Food and Nutrition Monitoring Plan (Coles-Rutishauser and Lester 1995) was also reviewed to guide priority-setting for NSW.

## **Methods**

Consultations were conducted with users of food and nutrition information throughout NSW. Three methods were used to obtain information, suited to the interest and availability of those consulted.

1. A **short mail-out self-completed survey** was the most commonly used method of consultation. The mailed questionnaire was preceded by a phone call to explain the purpose of the consultation, and obtain consent to participate. Each mail-out survey included:

- an introductory letter;
- instructions for completing the questionnaire/table;
- a table that highlighted a range of food and nutrition issues and asked respondents to rank order them by importance for nutrition monitoring;
- a ‘uses’ table which described ways nutrition information may be used (for prompting);
- a set of cards with potential nutrition issues marked, to be sorted by respondents;
- a table with issues listed and a column to indicate what data is currently collected at Area/District level (or in the case of State respondents, consultants were asked if they knew of any other sources of data); and
- a table listing ways food and nutrition information could be supplied and disseminated (to be ticked by respondents).

2. **Group consultations** were conducted with the Research and Evaluation Coordinators, the Nutrition Network group, and the Health Promotion Directors. These group consultations were similar to the mail-out survey, with the exception that the rank ordering occurred in small groups, with an opportunity for discussion and clarification and group ranking (in addition to individual ranking);
3. **Interviews** were conducted with State Health Department representatives. These structured interviews followed a similar format to the mail-out survey. The questions included:
  - what five issues were considered the most important to monitor;
  - how nutrition information could be used, including planning and policy-development;
  - any other nutrition issues which could be considered for monitoring; and
  - how nutrition information could best be disseminated among NSW Health staff.

The survey was modified to its final form after pilot testing and consultation with Alan Sheill, Health Economist at the University of Sydney.

Respondents were asked to consider a list of important nutrition issues for monitoring in NSW, to rank order them in terms of their importance, and to add any additional issues they considered to be important to monitor. The list of issues was generated from those identified in the *Plan for a National Food and Nutrition Monitoring Program* (Coles-Rutishauser and Lester 1995), the *Outline of a National Monitoring system for Cardiovascular Disease* (Bennett et al 1995) and *Food and Nutrition: Directions for NSW 1996-2000* (Martin and Macoun 1996) (refer to Table 1.1 in the Introduction to this report).

A list of potential uses of nutrition information was also supplied, adapted from the work of Pelletier (1995).

## **Results**

Ninety-three public health professionals were contacted to participate in the consultations, either in groups, as interviews or in the mail-out survey. Of these, seventy-three completed at least one of the methods of consultation, a **response rate of 78%**. There was a higher response rate among interviewees and group participants than for the mail-out survey, for example, the community nutritionists participating in the nutrition network meeting had a response rate of 94% compared with 38% for nutrition academics.

Table A1.1 shows the most common nutrition issues perceived as important to monitor by all groups of consultees combined. The rank order of issues varied according to types of public health professionals consulted. For example, nutritionists who were most familiar with the current emphasis on consumption of basic food groups, and with growth issues among disadvantaged groups, rated these issues higher than non-nutritionists. Health promotion personnel, and State health managers, who are currently asked to account for progress in

reducing fat intake to achieve improvements in heart disease mortality rates, ranked “fat consumption habits” higher than did other groups.

Several additional issues were nominated. The most common of these were the prevalence of eating disorders/disordered body image, and prevalence of limited access to nutritious food choices in food outlets. Many others were mentioned, each by only one or a small number of consultees. These were often highly specific and reflected the interests of individual workers, such as zinc intake in pregnancy and childhood, use of functional foods, and vitamin D status of the elderly. Others recognised the lack of information currently available as a basis for planning advice and interventions such as prevalence of use of medicinal herbs, garlic, and functional foods; cooking skills; prevalence of use of special diets; water consumption; views about government involvement in improving food and nutrition; quality of foods available; nutrition knowledge of various groups; and the ‘side effects’ of following the dietary guidelines. Others expressed a need for better information about population intakes and nutritional status related to: fibre, sodium, and energy intakes, and the vitamin status of various groups.

Broadly, four main uses of nutrition information were nominated:

1. to identify factors affecting nutrition problems;
2. to initiate and sustain political support for nutrition action;
3. to assess the impact of the total effort to improve nutrition; and
4. to assess the effectiveness of nutrition intervention strategies.

These uses of nutrition information were consistent across all categories of the consultees. Academics also considered an important use to be nutrition information to improve methods for future monitoring activities. The use of information about population nutritional status for education of the public and public health students was also identified as an important application.

For the most part, data about the important nutrition issues identified above, were also perceived as useful for at least one of the functions also described above. However, some individuals nominated particular data they would like, but did not rank it as one of the most important nutrition issues required for monitoring. For example, many coordinators of research and evaluation for Area Health Promotion Units said they would make use of information about alcohol consumption, but did not rate it as a priority issue for nutrition monitoring. A number of such additional specific pieces of information were nominated by consultees, and are included in Table A1.1 showing the fewest votes.

The preferred modes for presentation and dissemination of nutrition data were consistent between groups of information users: The main methods nominated were:  
summary report;  
fact sheets;  
computer database; and  
internet-based summary

## **Conclusions**

The most important issues identified for nutrition monitoring were relatively similar across different groups of potential users of nutrition information. Common uses of nutrition information were those related to obtaining political support for acting on an issue, and to assist in planning and evaluating interventions and the ‘total effort’ devoted to tackling a nutrition problem.

The information from these consultations has been used in the development of Table 1.1 in the Introduction of this report. This table lists the issues and potential topics for indicator development and outlines which sections of the document address the monitoring required for these issues. These consultations served the important need of identifying which issues were perceived as most important and which information would actually be used for the development of policies and programs.

Table A1.1 Most important nutrition issues for a monitoring system

<b>Important issues</b>	<b>Number of people identified issue as most important</b>
1. Fat consumption habits	29
2. Weight status of adults	28
3. Dietary change patterns	27
4. Food service in institutions	25
5. Food retailing	24
6. Intake of core food groups	22
7. Meal patterns	19
8. Growth and weight status of children	15
9. Fat intake	11
10. Alcohol consumption habits	8
11. Breastfeeding	6
12. Food security	2
13. Food service in commercial settings	2

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## **Appendix 2: Some current examples of initiatives that will benefit from a planned approach to nutrition monitoring in NSW**

### ***National initiatives***

#### **Implementation of the National Food and Nutrition Policy**

The first implementation phase of the *National Food and Nutrition Policy* (CDHHCS 1992) included the 1995 National Nutrition Survey and the establishment of the Food and Nutrition Monitoring Unit of the Australian Institute of Health and Welfare (disbanded in 1996), both of which have featured highly in the development of *Recommendations for Food and Nutrition Monitoring in NSW*.

*ARTD Management and Research Consultants* have been contracted by the Commonwealth Department of Health and Aged Care to develop a strategic framework for the next phase of implementation of the Policy, within the context of the National Public Health Partnership (see below). The first stage involved consultation and development of a national framework document which will be provided to the National Public Health Partnership group for consideration and possible incorporation into the work program of the Partnership, forming the basis of a nationally coordinated approach to food and nutrition for the next ten years.

#### **The Strategic Inter Governmental Nutrition Alliance of the National Public Health Partnership**

The National Public Health Partnership (NPHP) provides a framework for building a cooperative approach to protecting and improving the health of Australians. The principal members of the Partnership are the Commonwealth Department of Health and Aged Care, the primary health agencies of each of the States and Territories, the National Health and Medical Research Council and the Australian Institute of Health and Welfare. Other stakeholders such as local government, non-government organisations, health industry organisations and consumer organisations may be involved via working groups that are being established.

The Partnership has been identified as a mechanism to ensure that government responsibilities in public health are consistent, coordinated and collaborative. The Partnership provides considerable capacity to manage issues such as strategy development and coordinated implementation of the National Food and Nutrition Policy. Several generic areas of activity which will form the basis of the NPHP work program have been proposed:

- Public Health Research and Development
- *Public Health Information Development*
- *Public Health Planning and Decision Making*
- *Public Health Strategies Coordination*
- Public Health Practice Improvement
- Public Health Workforce Development
- Public Health Regulation and Legislation

Of these areas which require attention in order to build the capacity for implementing the Food and Nutrition Policy, three are particularly relevant to nutrition monitoring (highlighted above).

The establishment of a national partnership of the key government stakeholders in food and nutrition has been recommended as the first step in the development of a National Public Health Nutrition Strategy (Catford et al 1997). This strategy would form the basis of the government health sector's response to Phase 2 of the implementation of Australia's Food and Nutrition Policy. The **Strategic Inter Governmental Nutrition Alliance (SIGNAL)**, consists of representatives from the Commonwealth Department of Health and Aged Care (DHAC), State and Territory Health Departments, the Australian Institute of Health and Welfare (AIHW), the Australia and New Zealand Food Authority (ANZFA) and the National Health and Medical Research Council (NHMRC). SIGNAL reports to the NPHP (Catford et al 1997).

Catford et al (1997) recommend that the National Public Health Nutrition Strategy should be focused on a small number of key priority issues, including '**information development**, e.g., enhancing monitoring and surveillance systems, consistent collection of behavioural and environmental data at State/Territory level, ensuring comparability across national data sets.' It is envisaged that SIGNAL will work with relevant agencies and groups to review and refine long range nutrition targets, and that SIGNAL and/or DHAC would be responsible for the development of a management information system for the National Public Health Nutrition Strategy.

*Recommendations for Food and Nutrition Monitoring in NSW* contains recommendations for 'National networking to enhance NSW Food and Nutrition Monitoring' (refer to Chapter 3). SIGNAL will provide a useful forum for discussion of, advocacy for and development of the initiatives included in Chapter 3.

## **The National Food and Nutrition Monitoring Project**

The *Plan for a national food and nutrition monitoring program* (Coles-Rutishauser and Lester 1995) was developed as part of the work of the Food and Nutrition Monitoring Unit of

the Australian Institute of Health and Welfare (AIHW). This document provides a national context for food and nutrition monitoring at the State level and was used extensively in the development of issues and indicators for *Recommendations for Food and Nutrition Monitoring in NSW*.

Some of the initiatives which have been described in the National Plan require support and cooperation from the States and Territories and/or will provide specific support for food and nutrition monitoring at the State level. The most important of these from a NSW perspective are included in Chapter 3 of *Recommendations for Food and Nutrition Monitoring in NSW*.

Other documents produced by the AIHW Food and Nutrition Monitoring Unit, such as *A guide to instruments for monitoring food intake, food habits and dietary change* (Coles-Rutishauser 1996) and *Scanned retail sales data: an assessment of their potential for nutrition monitoring* (Watson et al 1995) have also been used in the development of *Recommendations for Food and Nutrition Monitoring in NSW*.

The Commonwealth Department of Health and Aged Care has awarded a contract to Dr. Geoff Marks, Nutrition Program, University of Queensland, with involvement from Dr. Karen Webb, Department Public Health and Community Medicine, University of Sydney for the development and management of Australia's food and nutrition monitoring and surveillance system. This is a major initiative that will form the basis of ongoing monitoring and surveillance activities in Australia. Major elements involve: analysis and reporting on existing national data sources, including the 1995 National Nutrition Survey; developing standardised approaches to the collection, analysis, and reporting of food and nutrition data; collation and analysis of data to address specific nutrition policy issues; and developing strategies for effective dissemination and application of information to decision-making. The project will complement and benefit state-level efforts in nutrition monitoring, by working towards a consistent approach to nutrition information with consideration for various user needs.

## **The National Nutrition Survey**

The 1995 National Nutrition Survey (NNS) provides the first nationally representative data on the food and nutrient intakes of Australians since the 1983 National Dietary Survey of Adults and the 1985 National Dietary Survey of Schoolchildren (aged 10-15 years). The NNS NSW sample is sufficiently large for some analyses by age and sex, and by metropolitan/rural areas. The 1995 NNS therefore provides the best available information on the food and nutrient intakes of NSW residents. Some State data are included in the survey publications and a set of State tabulations which the ABS has prepared. However, there is a substantial amount of useful data available regarding NSW priorities which has not been analysed. Recommendations for analysis, presentation and dissemination of NSW data from the NNS are included in Chapter 5 of *Recommendations for Food and Nutrition Monitoring in NSW*.

The NNS included several short questions relating to current food and nutrition policy objectives as well as a 24-hour recall interview and a food frequency questionnaire. These data will allow the validation of the short questions, as possible key indicators for nutrition monitoring. Thus, until we have a nationally agreed set of short questions, they provide a

good option for those seeking questions for State-wide or local population surveys as there is potential for validation and they provide information comparable to the NNS (as discussed in Chapter 4).

Considerable negotiation and advocacy on behalf of the States and Territories will be required to ensure that:

- another national nutrition survey is conducted within a reasonable period of time,
- the information collected in future surveys fulfils State needs for data about food and nutrient intakes, biochemical and physical measurements, and
- the analysis and dissemination of data from future surveys meets State needs.

Recommendations for national networking to support these requirements are included in Chapter 3 of *Recommendations for Food and Nutrition Monitoring in NSW*.

## **National Strategy for the Prevention of Overweight and Obesity**

The National Health and Medical Research Council's (NHMRC) document *Acting on Australia's Weight - A strategic plan for the prevention of overweight and obesity* (NHMRC 1997a), describes a strategy for the prevention of overweight and obesity in Australia, to be implemented over a five to 10 year time period. The strategy document indicates that successful implementation will involve collaboration at national and State levels, particularly with State Health Departments.

The national strategy has been a useful reference for *Recommendations for monitoring overweight and obesity in NSW* (refer to Chapter 6) and the section on national strategies for monitoring and evaluation has been taken into consideration in the development of the NSW recommendations. The NSW recommendations will provide an example of monitoring at the State level which will be useful for further national developments. As the strategies in the National plan are further developed, these should be incorporated into NSW initiatives relating to monitoring overweight and obesity.

## **The National Cardiovascular Disease Monitoring Plan**

The Australian Institute of Health and Welfare's *Outline of a national monitoring system for cardiovascular disease* (Bennett et al 1995) describes a cardiovascular disease monitoring system, including information on risk factors. Nutrition-related risk factors include: 'diet and nutrition' and 'overweight'. Indicators for these risk factors are outlined in the document and have been referred to in the development of indicators for NSW monitoring. In addition, this group has developed a set of data items and definitions for the *National Health Data Dictionary* (AIHW 1998) for monitoring overweight and obesity.

## **State initiatives**

### **The Directions document for food and nutrition in NSW**

*Food and Nutrition: Directions for NSW, 1996-2000* (Martin and Macoun 1996) provides ‘a clear statement of the NSW Health Department’s priorities for food and nutrition promotion and locates them within the context of national policy’. The priorities identified in this document include:

1. promoting demand for breads, cereals, vegetables and fruits,
2. promoting the supply of healthy food alternatives in the food service sector,
3. promoting Aboriginal nutrition,
4. developing ongoing monitoring and surveillance in nutrition, and
5. promoting food safety.

*Recommendations for Food and Nutrition Monitoring in NSW* is the main initiative designed to address the fourth priority, and has included the first priority in many of its suggested recommendations, including the short modules for use in population-based surveys (Chapter 4), the information required from the National Nutrition Survey (Chapter 5), recommendations for Area Performance Contracts and information to be included in the Chief Health Officer’s Report, and recommendations for nutrition-specific publications in NSW (Chapter 2).

The supply of healthy food alternatives in the food service sector has been included in recommendations for specific monitoring initiatives in NSW (Chapter 2). Promoting Aboriginal nutrition has been addressed in the short modules section (Chapter 4) and the recommendations for future monitoring work (Chapter 2).

### **The NSW Cardiovascular Disease Strategy**

*Coronary Heart Disease - NSW Goals and Targets and Strategies for Health Gain* (NSW CHD EWG 1995) outlines goals and targets, and proposes specific strategies and policies, for State-wide and local implementation of a health outcomes approach to the prevention and control of cardiovascular disease in NSW. The priority area of ‘prevention in a healthy population’ includes ‘improved nutrition’ as one of its three key issues. The goals, targets and strategies contained in this document relate to some of the most important nutrition issues of *Recommendations for Food and Nutrition Monitoring in NSW*, for example, fat intake, saturated fat intake, intake of core foods (breads, cereals, fruit and vegetables), sodium intake and overweight and obesity.

### **The NSW Health Survey and other State surveys**

The NSW Health Survey and other State surveys which may be repeated, for example the High School Drug and Alcohol Survey, are ideal opportunities for the inclusion of nutrition-related questions. It is unlikely that any ‘single topic’ surveys will be conducted on a regular basis in NSW in the near future. It is therefore essential that nutrition questions are included in risk factor surveys, fitness surveys and other surveys which cover a representative sample of

the NSW population. The availability of well-researched and standardised questions increases the likelihood of including nutrition in health surveys. Use of standard questions also ensures comparability of survey results to give a clearer picture than is currently available of progress towards nutrition goals and targets.

Recommendations for short modules, i.e., sets of nutrition-related questions or scales, for use in population-based surveys in NSW and NSW Health Areas have been made in Chapter 4 of this recommendations document.

## **The NSW Strategy for Population Health Surveillance**

The Epidemiology and Surveillance Branch of the NSW Health Department has developed a *Strategy for Population Health Surveillance in New South Wales* (NSW HD 1997) which describes the context and current status of population health surveillance in NSW, and outlines priorities for its improvement. The document recommends the development of surveillance objectives in key areas, including, among others:

- cardiovascular disease,
- cancer,
- diabetes,
- asthma,
- physical activity,
- food and nutrition, and
- environmental health.

*Recommendations for Food and Nutrition Monitoring in NSW* addresses several of these (cardiovascular disease, cancer, food and nutrition), through the short modules recommended for use in population-based surveys (refer to Chapter 4), the information required from the National Nutrition Survey (refer to Chapter 5) and the recommendations for monitoring overweight and obesity in NSW (refer to Chapter 6).

## **The Chief Health Officer's report**

Limited information about nutrition-related issues was included in *The Health of the People of New South Wales - Report of the Chief Health Officer* (NSW HD 1996). There was considerable potential for expansion of the nutrition section and the development of the 1997 Chief Health Officer's report involved consultation with the NSW Food and Nutrition Monitoring Project to establish the best nutrition-related data for inclusion in this publication.

## **Local initiatives**

### **Area Performance Contracts**

During the time frame of the NSW Food and Nutrition Monitoring Project, the NSW Health Department was in the process of developing a strategies implementation document for the NSW Coronary Heart Disease Goals and Targets (described above). This document formed the basis for negotiations with Area Health Services with respect to Area Performance Contracts and associated yearly reporting procedures. The strategies implementation document contains strategic activities, three year outcomes and performance indicators for different topic areas including food and nutrition. The NSW Food and Nutrition Monitoring Project commented on the draft food and nutrition section of the strategies implementation document, particularly in relation to appropriate indicators for Area Health Service reporting.

### **Health Outcomes Councils**

Each Area Health Service is required to have a Health Outcomes Council. Their primary role is to advise Area Health Service Boards and senior executives on priority setting and strategies for improving health. This includes reviewing current services and programs and monitoring the effectiveness of strategies in relation to the NSW Health Goals and Targets in the key priority areas of:

- cardiovascular disease (CVD),
- cancer,
- injury,
- mental health, and
- diabetes.

Nutrition monitoring will provide information relevant to the areas of CVD, cancer and diabetes.

## Appendix 3: NSW priorities for National Nutrition Survey data

**\*Table A3.1: Body mass index (adults)**  
(physical measurement)

	Age							Total Met	Total X-Met
<b>BMI</b>	19-24	25-34	35-44	45-54	55-64	65-74	75+		
All ages									
	(Per cent)								
<b>Males</b>									
Underweight (<20)									
Acceptable weight (20-25)									
Overweight (>25 ≤ 30)									
Obese (>30)									
Not stated									
Total									
	(kg/m <sup>2</sup> )								
Mean									
5th centile									
Median									
95th centile									
Standard error of mean									
	(Per cent)								
<b>Females</b>									
Underweight (<20)									
Acceptable weight (20-25)									
Overweight (>25 ≤ 30)									
Obese (>30)									
Not stated									
Total									
	(kg/m <sup>2</sup> )								
Mean									
5th centile									
Median									
95th centile									
Standard error of mean									

**\*Table A3.2: Waist-to-hip ratio (adults)**  
(physical measurement)

	Age								
<b>WHR</b>	19-24	25-34	35-44	45-54	55-64	65-74	75+	Total Met	Total X-Met
All ages									
								(Per cent)	
<b>Males</b>									
Acceptable									
Above recommended <sup>a</sup>									
Not stated									
Total									
								(Ratio)	
Mean									
5th centile									
Median									
95th centile									
Standard error of mean									
								(Per cent)	
<b>Females</b>									
Acceptable									
Above recommended <sup>a</sup>									
Not stated									
Total									
								(Ratio)	
Mean									
5th centile									
Median									
95th centile									
Standard error of mean									
<sup>a</sup>								> 0.9 for men	
								> 0.8 for women	

**\*Table A3.3: Heights, weights, body mass index, waist-to-hip ratio (children)**  
(physical measurement)

	Age																
	Fine age range																
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<b>HEIGHT</b>																	
	(m)																
<b>Boys</b>																	
Mean																	
5th centile																	
10th centile																	
15th centile																	
25th centile																	
Median																	
75th centile																	
85th centile																	
90th centile																	
95th centile																	
Standard error of mean																	
<b>Girls</b>																	
Mean																	
5th centile																	
10th centile																	
15th centile																	
25th centile																	
Median																	
75th centile																	
85th centile																	
90th centile																	
95th centile																	
Standard error of mean																	
<b>WEIGHT</b>																	
	(kg)																
<b>Boys</b>																	
(As above)																	
<b>Girls</b>																	
(As above)																	
<b>BMI</b>																	
	(kg/m <sup>2</sup> )																
<b>Boys</b>																	
(As above)																	
<b>Girls</b>																	
(As above)																	
<b>WHR</b>																	
<b>Boys</b>																	
(As above)																	
<b>Girls</b>																	
(As above)																	

**Tables A3.4 - A3.8: Food intake (2, 3, and 4-digit food groups)**

(from IFIQ)

**Table A3.4: Mean (per capita)**

**Table A3.5: Mean (per consumer)**

**Table A3.6: Median (per capita)**

**Table A3.7: Median (per consumer)**

**Table A3.8: % consuming**

Age

**Foods**

ages

2-3 4-7 8-11 12-15 16-18 19-24 25-34 35-44 45-54 55-64 65-74 75+ Total Met Total X-Met All

(g/person/day)

**Males**

2 digit

+3 digit

+4 digit

categories

**Females**

2 digit

+3 digit

+4 digit

categories



**Table A3.13: Core food group intake - % above recommendation<sup>a</sup>**  
(from FFQ or probability analysis IFIQ)

	Age														
	2-3	4-7	8-11	12-15	16-18	19-24	25-34	35-44	45-54	55-64	65-74	75+	Total Met	Total X-Met	All
<b>Core food groups</b>															
<b>Males</b>															
breakfast cereal															
bread															
rice/pasta															
cereal total															
vegetables (excluding juice)															
vegetables (including juice)															
fruit (excluding juice)															
fruit (including juice)															
meat (all types-including fish)															
eggs															
meat/eggs total															
milk equivalents															
<b>Females</b>															
breakfast cereal															
bread															
(As above)															
<sup>a</sup> as in <i>The Core Food Groups</i> (NHMRC, 1995)															

**Tables A3.14-18:**  
(from IFIQ)

- \*Table A3.14: Mean (per capita)
- Table A3.15: Mean (per consumer)
- \*Table A3.16: Median (per capita)
- Table A3.17: Median (per consumer)
- \*Table A3.18: % consuming

Age

**Food categories**      2-3   4-7   8-11   12-15   16-18   19-24   25-34   35-44   45-54   55-64   65-74   75+   Total Met   Total X-Met   All ages  
(g/person/day)

**Males**

high fibre bread  
 low fibre bread  
 high fibre breakfast cereals  
 low fibre breakfast cereals  
 high fat dairy fats/margarines  
 low fat dairy fats/margarines  
 full fat milk  
 reduced fat milk  
 low fat milk

(g/person/day)

**Females**

high fibre bread  
 low fibre bread  
 high fibre breakfast cereals  
 low fibre breakfast cereals  
 high fat dairy fats/margarines  
 low fat dairy fats/margarines  
 full fat milk  
 reduced fat milk  
 low fat milk

**\*Table A3.19: Nutrient intake - Mean (per capita)**  
(from IFIQ)

Nutrients	Age														
	2-3	4-7	8-11	12-15	16-18	19-24	25-34	35-44	45-54	55-64	65-74	75+	Total Met	Total X-Met	All ages
<b>ENERGY</b>															
<b>Males</b>															
Mean															
5th centile															
Median															
95th centile															
Standard error of mean															
<b>Females</b>															
Mean															
5th centile															
Median															
95th centile															
Standard error of mean															
<b>WATER</b>															
<b>Males</b>															
(As above)															
<b>Females</b>															
(As above)															
Continue with other nutrients															

(unit as appropriate)

**\*Table A3.20: Contribution of nutrients to total energy intake  
(from IFIQ)**

Nutrients	Age											Total Met	Total X-Met	All
	2-3 ages	4-7	8-11	12-15	16-18	19-24	25-34	35-44	45-54	55-64	65-74			
<b>FAT</b>														
<b>Males</b>														
Mean														
5th centile														
Median														
95th centile														
Standard error of mean														
<b>Females</b>														
Mean														
5th centile														
Median														
95th centile														
Standard error of mean														
<b>SATURATED FAT</b>														
<b>Males</b>														
(As above)														
<b>Females</b>														
(As above)														
<b>CARBOHYDRATE</b>														
<b>Males</b>														
(As above)														
<b>Females</b>														
(As above)														
<b>ALCOHOL</b>														
<b>Males</b>														
(As above)														
<b>Females</b>														
(As above)														
<b>PROTEIN</b>														
<b>Males</b>														
(As above)														
<b>Females</b>														
(As above)														

**\*Table A3.21: Persons who met selected dietary recommendations for nutrient intakes (adults)**  
(FFQ or probability analysis IFIQ)

	Age									
<b>Recommendation</b>	19-24	25-34	35-44	45-54	55-64	65-74	75+	Total Met	Total X-Met	All ages
	(Per cent)									
<b>Males</b>										
Dietary fat intake $\leq 30\%$ of total energy intake										
Saturated fat intake $\leq 10\%$ of total energy intake										
Carbohydrate intake $\geq 55\%$ of total energy intake										
Alcohol intake $\leq 5\%$ of total energy intake										
Dietary cholesterol intake $\leq 300$ mg/day										
Calcium intake $\geq$ :										
800 mg/day (men)										
800 mg/day (women <54 years)										
1000 mg/day (women $\geq 54$ years)										
Iron intake $\geq$ :										
7 mg/day (men)										
12 mg/day (women <54 years)										
5 mg/day (women $\geq 54$ years)										
Dietary fibre intake $\geq 30$ g/day										
<b>Females</b>										
(As above)										

**\*Table A3.22 : Persons who had selected dietary habits**  
(from specific questions unless otherwise stated)

	Age											Total	Total	
	2-3	4-7	8-11	12-15	16-18	19-24	25-34	35-44	45-54	55-64	65-74			75+
All ages													Met	X-Met

(as appropriate for each question)

(Per cent)

**USUAL DAILY NUMBER OF EATING OCCASIONS**

**Males**

- Once
- 2-4 times
- 5-6 times
- 7 or more times
- Don't know/varies/depends

**Females**

(As above)

**USUAL FREQUENCY OF BREAKFAST CONSUMPTION**

**Males**

- Rarely or never
- 1-2 days
- 3-4 days
- 5 or more day
- Don't know/varies/depends

**Females**

(As above)

**FREQUENCY OF SALT USE IN COOKING**

**Males**

- Never/rarely
- Sometimes
- Usually
- Don't know

**Females**

(As above)

**FREQUENCY OF SALT USE AT TABLE**

**Males**

- Never/rarely
- Sometimes
- Usually

**Females**

(As above)  
Continued

**Table A3.22 (continued)**

	Age													Total	Total	
	2-3	4-7	8-11	12-15	16-18	19-24	25-34	35-44	45-54	55-64	65-74	75+				
All ages															Met	X-Met
	(as appropriate for each question)															
	(Per cent)															
	<b>TYPE OF MILK USUALLY CONSUMED</b>															
	<b>Males</b>															
	Whole															
	Low/reduced fat															
	Skim															
	Evaporated or sweetened condensed															
	None of the above															
	Don't know															
	<b>Females</b>															
	(As above)															
	<b>MEAT TRIMMING</b>															
	<b>Males</b>															
	Never/rarely															
	Sometimes															
	Usually															
	Don't eat meat															
	<b>Females</b>															
	(As above)															
	<b>SERVES OF VEGETABLES USUALLY EATEN EACH DAY</b>															
	<b>Males</b>															
	1 serve or less															
	2-3 serves															
	4-5 serves															
	6 serves or more															
	Don't eat vegetables															
	<b>Females</b>															
	(As above)															
	<b>SERVES OF FRUIT USUALLY EATEN EACH DAY</b>															
	<b>Males</b>															
	1 serve or less															
	2-3 serves															
	4-5 serves															
	6 serves or more															
	Don't eat fruit															
	<b>Females</b>															
	(As above)															

**Table A3.22** (continued)

	Age													Total	Total	
	2-3	4-7	8-11	12-15	16-18	19-24	25-34	35-44	45-54	55-64	65-74	75+	Total	Total		
All ages															Met	X-Met

(as appropriate for each question)

(Per cent)

**WEIGHT CHANGE OVER PREVIOUS YEAR**

**Males**

Increased

Decreased

Stayed the same

Don't know

**Females**

(As above)

**REASONS FOR WEIGHT CHANGE OVER PREVIOUS YEAR**

**Males**

Change in kind of food/drink consumed

Change in amount of food/drink consumed

Ageing or physical growth

Change in physical activity levels

A medical condition

No special reason

Other

**Females**

(As above)

**FOOD SECURITY**

**Males**

Yes

No

**Females**

Yes

No

**PROPORTION OF MEALS, SNACKS OBTAINED AWAY FROM HOME**

(from IFIQ)

**Males**

**Females**

**Table A3.23: Vitamin and mineral supplements<sup>a</sup>**  
(from FFQ)

Supplement	Age										Total Met	Total X-Met	All ages
	12-15	16-18	19-24	25-34	35-44	45-54	55-64	65-74	75+				

(Per cent)

**MULTIVITAMIN WITH IRON OR OTHER MINERALS**

**Males**

- Never, or less than once a month
- 1-3 times per month
- Once per week
- 2-4 times per week
- 5-6 times per week
- Once per day
- 2-3 times per day
- 4-5 times per day
- 6+ times per day

**Females**

(As above)

**MULTIVITAMIN**

**Males**

(As above)

**Females**

(As above)

continue with other supplements as in FFQ

<sup>a</sup> Average number of times consumed in the last 12 months

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### *The Food and Nutrition Monitoring Project team included:*

Beth Stickney <sup>1</sup>	Karen Webb <sup>1</sup>	Vicki Flood <sup>1</sup>	Moira Hewitt <sup>1</sup>
Elizabeth Reay <sup>1</sup>	Fiona Blyth <sup>1</sup>	Annette Dobson <sup>2</sup>	Stephen Leeder <sup>1</sup>

<sup>1</sup> Department of Public Health and Community Medicine, University of Sydney

<sup>2</sup> Centre for Clinical Epidemiology and Biostatistics, University of Newcastle

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Director, Nutrition Program, Australian Centre for International and Tropical Health and Nutrition, University of Queensland

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Senior Lecturer, Department of Human Nutrition, Deakin University

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Dorothy Mackerras

Senior Lecturer in Nutrition, Menzies School of Health Research, NT

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Alan Shieff

Senior Lecturer in Health Economics, Department of Public Health and Community Medicine, University of Sydney

**Epidemiology and biostatistics**

Bill Schofield

Research Fellow, Department of Public Health and Community Medicine, University of Sydney

Ross Lazarus

Associate Professor and Sub-Dean for Information Technology, Faculty of Medicine, University of Sydney

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***Advisory group (NSW Health Department):***

Edwina Macoun	Food and Nutrition Unit
Louisa Jorm	Epidemiology and Surveillance Branch
Glenn Close	Centre for Clinical Policy and Practice
Bill Porter	Food and Nutrition Unit
Andrew Hahn	Centre for Disease Prevention and Health Promotion

***Layout and graphics:***

Margaret Atkinson-Howatt Margaret's Office - Hive of Activity, Eastwood, NSW