

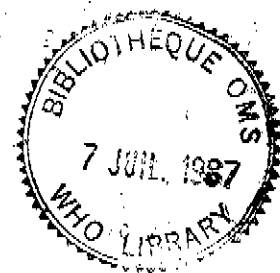
WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR EUROPE
ARTS AND CRAFTS CENTER
COPENHAGEN

DRAFT REPORT ON THE SECOND CONSULTATION

ON NUTRITION SURVEILLANCE IN THE EUROPEAN REGION

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Introduction

Following a most productive meeting on nutrition surveillance held in the European Regional Office in October 1985, this meeting was a continuation and further development of the actions started at that time.

Since an important objective for the Nutrition Unit is to assist Member States in the formulation of nutrition policies, and nutrition surveillance is one of the basic prerequisites for this kind of policymaking, the development of a solid basis of knowledge in this area has been given high priority.

Data on diet and its impact on health are available in most Member States, but in many cases nutrition policymakers need help in collation, analysis and presentation of existing information.

Purpose of the Consultation

The participants in the consultation were all experts in the field of nutritional data collection and analysis, from eight countries in the Region.

(See annex 1 for list of participants). They were asked to advise the

Nutrition Unit, and also the Units of Chronic Diseases and of Epidemiology, in

the following areas:

How could the FAO Food Balance Sheet (FBS) database, which has recently been made available to the Regional Office by FAO, be best utilized? Would a presentation of the data along the lines of the existing CAP (Computer Assisted Presentation) be regarded as a useful tool?

In the Health for All Strategy context, what would be the most suitable indicators for changes in the dietary pattern in the Region?

How could a course on collection of dietary data following a simplified format (food frequency questionnaires) be conducted in the context of the Countrywide Integrated Noncommunicable Disease Intervention Programme (CINDI)? Was there a general need for additional offers on courses in dietary investigation?

Finally, the consultation discussed the outline of a book for policymakers on nutrition surveillance, to be seen as a corollary to the book entitled: "Healthy nutrition: prevention of nutrition-related diseases in Europe" (expected publication 1987).

The FAO Food Balance Sheets (FBS) data base

From FAO in Rome the Regional Office has received on magnetic tape a large amount of information on 29 of the countries in the European Region. The data comprise figures for the availability of some 380 foods in kg/capita/year from 1961 to 1984. It was felt necessary to go to this level of detail, to enable us to group the data differently according to different purposes. For all foods contribution of energy, fat, protein and carbohydrate (by difference) are given. A separate file contains, for the same years and countries, totals of energy, fat, protein, and carbohydrate. Yet another file

contains total availability of eight micronutrients (iron, calcium, retinol, beta-carotene, thiamine, niacine, riboflavine and ascorbic acid). A presentation of graphic work done on the basis of this file was presented to the meeting.

The group discussed the quality of the FBS data at length, and made suggestions regarding possibilities and limitations of their use. It was suggested that it was equally interesting to look at both foods and nutrients, as the information provided in several ways is complementary. It was recommended to continue to try out various forms of presentation of the data.

A paper was presented which gave a comparison between the FAO FBS data and those of OECD, and demonstrated differences in the figures possibly due to different conversion factors. There are also differences between the food balance sheets of FAO and those prepared at national level based in the various countries on national statistics and food composition tables.

The conclusion of the group was that this type of data gives indications about trends and levels of consumption, and therefore has its use in a broad context where indicative evidence is called for. The data also lend themselves to international comparison of levels of intakes of foods and nutrients, and of trends. For national level planning and advisory purposes national food balance sheets and other accounts should be provided.

The consultation proposed that the subject of food balance sheet data be given broad coverage in the planned publication on nutrition surveillance (see page 9).

Having been shown the programme "Computer assisted presentation" (CAP) developed for the presentation of the Regional Indicators, the group felt that a similar format of presentation based on the FAO FBS data could be very instructive and serve a useful purpose in teaching and in advocacy of nutrition policy formulation.

Indicators for dietary changes

Under Target 16 (positive health behaviour) the need arises to monitor progress towards "balanced nutrition". The proposal has so far been to monitor, under indicator 16.3 "average daily intake of calories, proteins, lipids and carbohydrates, by age, sex and level of activity". The data used for this kind of monitoring has been based on FAO FBS data.

The group were in agreement with using this source of information, since it represents the only reasonably standardized and internationally comparable data related to food intake. The comment under 16.3 in the Revision of Indicators document (EUR/RC36/10) should therefore be amended accordingly. Since the FAO FBS data represent food availability, the text of the indicator also needs to be changed.

For monitoring purposes, the group underlined the importance of objective setting in a national context. This is to say that for the monitoring of nutritional data, the country has to have clearly expressed ideas as to what the population ought to eat, expressed both in terms of nutrients and in terms of foods. It is possible that the existence of such objectives or guidelines should be considered an indicator in itself.

The group further recommended that in the presentation of data on nutrients, relative amounts be used whenever possible, rather than absolute ones, bearing in mind the known sources of error of the data.

Specifically, it was recommended that the percentage of daily energy availability per capita from fat and protein be monitored, as well as the availability per 1000 kcal of some of the micronutrients for which FAO has data. The objective of the latter would be to provide an indication of variability and quality of the food, and it was proposed to include calcium, ascorbic acid, iron and retinol in the monitoring. It was regarded as useful to include the FAO FBS data on alcohol in addition to those collected under 17.1.

It was proposed to include as a comment that if a country feels that they can provide data on differences in availability (or intake) by regions, occupations, social group or income level, this would be most valuable. It was further suggested that data on availability or intake by age, sex and level of activity should be moved to the "supplementary indicator" category.

The group proposed that the comment under indicator 16.8 on "Anthropometrical measures" should be shortened, in that the references to specific age groups could be deleted.

CINDI dietary data collection course

The collection of information on dietary change in the CINDI programme will be done through collation of macro-level data (food balance sheets, household expenditure/consumption surveys) and through food frequency questionnaires.

It has become clear that there is an urgent need for assistance to those responsible for constructing the questionnaires, which has to be done on a national basis, taking national food patterns into account. There have been many attempts to collect this kind of information which have failed because of imprecise formulation of the questions, which will subsequently yield meaningless data.

The group warned that if the course was to cover both the capture and the analysis and presentation of the data, it would have to last for at least two weeks. Since the current plan is to hold the course in March 1987, in time for the data collection to start in May 1987, it was suggested that one could trim it down to a five-day course, which would concentrate on data collection, seeing to it that this is well done. At a later stage the management and analysis of the data could then be taken care of.

For the sake of simplicity the best place to hold the course would, in the view of the group, be Copenhagen.

Getting teachers for the course might be a problem, since personal experience in using the method would be a prerequisite. Most of the internationally accepted work using this food frequency method has been done in the USA. Dr Pietinen, who has contributed to the CINDI manual on the subject and who has this experience, would look into the matter. Dr Callmer has agreed to assist as well.

The participants should be asked to prepare themselves for the course by:

1. Either soliciting or themselves formulating in precise terms the goals for dietary change in their country (or CINDI area) both in terms of nutrients and in terms of projected changes in food patterns (for example expected changes by the year 2000).
2. Collating existing macro-level dietary data from their own country (national food balance sheets, household expenditure/consumption survey data) and bring it with them to the course for a discussion on its presentation.
3. Preparing draft national food frequency questionnaires for discussion at the course.

The course would then start by first a theoretical and then a practical analysis of the background information available. The background and rationale for the CINDI programme monitoring would have to be discussed. The methodology and its advantages and limitations would have to be described, illustrated and discussed. Sufficient time would be given for the participants to work on their own questionnaire, and for individual discussion with the facilitators. A brief presentation of possible ways of management, analysis and use of the data would be included, but there would not be enough time to do this in a way that would enable inexperienced participants to do this on their own.

The consultant to the Chronic Diseases Unit, who is in charge of the CINDI programme coordination, was participating in the discussion and will follow up the matter.

Courses on nutritional epidemiology

The group immediately agreed that there was a great, un-met need for special courses in nutritional epidemiology with emphasis on practical aspects of dietary survey methodology. The situation today is that although dietary survey methodology is taught as part of higher training in nutrition, there is no way this training can be given in sufficient detail that it will meet the needs of those who are about to undertake a large or small survey. What usually happens is therefore that those who are asked to carry out the dietary survey have to make their own painful experiences, at the cost of time, money and useless data.

The natural target group for such a course would be people involved in - or planning to get involved in - nutrition surveillance or dietary studies. They would have to be on a sufficiently senior level so that they would in turn be able to teach others at their national level. "Others" would especially be the many investigators who are doing research which is primarily focused on other subjects, who want to include some questions on the subject of nutrition in their study protocol. These investigators frequently underestimate the complexities of dietary studies and the many pitfalls that can so easily make the data collected useless.

Such a course would go through the several different methods for dietary study (for example dietary history, 24-hour recall, food frequency, food recording) with an emphasis on practical aspects of survey conduct and data management and analysis. It would include both theory and practical training.

Although this is at present not one of the subjects foreseen within the Nutrition Programme, it would fall well within the scope of the activities undertaken there - either as a collaborative activity with an interested institution or as part of the 90-91 programme.

Dr Wheeler from the London School of Hygiene and Tropical Medicine expressed interest in taking the subject up as part of the courses offered by the School. She would explore the possibilities and make a draft proposal which would be circulated to the group for comments, after which a firm proposal would be made, for WHO to follow up.

Publication for policymakers on nutrition surveillance

A draft outline for the above publication had been circulated as a working paper. In addition Dr Sekula and Dr Kelly submitted papers pertinent to one of its chapters.

The group started by discussing target group(s) for the publication, considering several options. In the end it was agreed that the document most reasonably could be aimed at the academically educated health policy-makers, who are looking for information on dietary patterns in their countries. This, incidentally, is the same target group as that of the previous basic document to be published by the Nutrition Unit (Healthy nutrition: preventing nutrition related diseases in the European Region).

The group discussed the outline presented, and made several suggestions for change. Then each chapter was discussed in sequence. For a summary of the result see annex 2. Several of the participants expressed their willingness to contribute to the publication. Kelly, Sekula, Trichopoulou,

Arab, Haraldsdottir, Wheeler, Callmer, Kevany and Helsing will all make their contributions. Dr Buss at the Ministry of Agriculture in the United Kingdom will also be invited to participate.

A timetable for the work was drawn up as follows:

19 December 1986: outline or abstract of all contributions to be submitted to the Nutrition Unit who will collate them and recirculate this skeleton of the book, to allow everybody to see their contribution in relation to the total.

24 April 1987: draft manuscript to be submitted to the Nutrition Unit.

20-23 May 1987, FENS Conference in Warsaw: Most of the contributors will be at this conference, and time will be found for a meeting to go over and finalise the draft of the publication.

Workshop on household expenditure/consumption surveys

Finally, the group was informed about the workshop for statisticians, nutritionists and others working with or using household expenditure/consumption surveys, aiming at the improvement of this important source of information for the purpose of nutrition policy planning.

The group gave several valuable suggestions for the workshop. These were further discussed in a separate planning meeting for the workshop between Professor Trichopoulou, Dr Kelly, and Ms Helsing.

IUNS Committee on Nutrition Surveillance

A separate meeting was also held on the second day of the Consultation convened by Dr Arab who is chairwoman of the International Union of Nutritional Sciences' committee on Nutrition Surveillance. Present at this meeting were also Dr Kelly, Dr Wheeler (for Dr Buss), Professor Trichoupoulou and Ms Helsing, who all are on the Committee.

The Committee, which has just been established, discussed its mandate and work plans. These will be the subject of a separate report from Dr Arab.

DRAFT OUTLINE OF A PUBLICATION ON NUTRITION SURVEILLANCE

1. Introduction (Helsing)

The rationale for nutrition surveillance will be given, ranging from the nutrition policy planning context to the identification of risk groups in various contexts (an example would be risk groups after the recent Chernobyl accident). It should also be noted that one does not always have a clear strategy for dealing with what one monitors: the surveillance may well be done because there is a qualified reason to believe there is a health risk.

As this chapter will be written last, it should also set the various contributions into an overall context.

2. Sources of information (Kelly)

Discussion of the relative merits of various methodologies on dietary surveillance from a food and nutrition policymaking point of view.

3. Health impact monitoring (Kevany)

The publication will treat this important subject in a rather summary way, since it is the object for discussion in several other fora, and in the WHO context, health impact data is part of the whole set-up of data collection in the epidemiology and statistics area. This will have to be rather explicitly spelled out, to avoid criticism for not having included health related data.

The reason for focusing on dietary data collection is that this kind of data - especially on populations - although the subject of much scientific work, is rarely presented and analysed with practical application in mind.

The chapter will make reference to the book "Healthy Nutrition..." where this information is already extensively presented and discussed. The chapter will give a short overview of disease

profiles, and discuss anthropometric, clinical and biochemical data as they are commonly found in the Region today. Pitfalls in using this kind of data for planning purposes will be discussed, as well as scope for improvement of the data from a policymaking point of view. Suitable graphics will be presented.

This chapter will also have to advance a hypothesis about the relationship between diet and health. Such a hypothesis - or statement - should be lifted from an existing WHO source. The protocol of the CINDI project was proposed, other sources will have to be looked into.

4. Food balance sheets (Kelly and Helsing)

Analytical overview, based on the text of a report already written by Kelly for another purpose.

Description of FAO's FBS data based on a report from a visit to the Statistics Division in FAO, Rome, by Helsing.

FAO-OECD comparison, based on an analysis done by Sekula, to be incorporated in the text by Kelly.

A graphic presentation of FAO FBS data, possibly also of national FBS data if suitable examples can be found, by Helsing

Discussion of the differences between FAO and national FBS data, with illustrations, from four countries:

Denmark (Haraldsdottir)

Greece (Trichopoulou)

Poland (Sekula)

United Kingdom (Wheeler)

5. Household expenditure/consumption surveys

Here no suitable author has been identified. It is possible that a contributor could be found after the WHO workshop on the subject has been held in Athens in September.

5. A brief description of dietary survey methods (based on article by Nordic group)

The article will make reference to the Manual on Methodology for Food Consumption Studies currently produced by the IUNS Committee on Food Consumption Surveys for the Oxford University Press.

This article will also contain an overview of minimum quality requirements in relation to these methods, to guide policymakers in their use of existing surveys. To be contributed by Haraldsdottir.

6. Problems and pitfalls of "food to nutrient" conversion (Lenore)

- a. Food description

Limit of available information/missing information/number of items
Terminology (in international comparisons)
Aggregation (Buss??)

- b. Portion problems

Estimation of amount consumed
Yield factors
Carcass/waste

- c. Preparation and availability

Nutrient losses and gains
Biological availability
Nutrient interactions

- d. Food tables

Sampling
Analytical problems
Edible portions
Borrowed values
Missing values
Non-availability of specific foods

- e. Computer-technical (analytical) problems

Database size
Software need

7. Use of information from small surveys (Callmer)

How to utilize available dietary surveys, conducted for a variety of purposes, in order to supplement the information gained from population-based data sets.

8. Population-level surveys (Buss)

Possibilities and pitfalls in large scale studies of diets:

This chapter is aimed at policymakers who plan to execute or promote a large dietary survey for whatever reason.

- What is the objective of the study? (Baseline, risk-group identification, political instrument...)
- Synchronisation with other existing, ongoing or planned large-scale health studies which may or may not include dietary components.
- In sampling: decide on observation unit (household or individual), and thoroughly discuss the usefulness of representativity (Is a nationally representative sample really necessary? Perhaps "extremes" will do, if the population is well known to the investigator.
- In choice of method accuracy must be weighed against participation rate.
- Plan at the outset for analysis of non-response.
- Should the study include health parameters?
- Survey staff selection and training problems.
- Importance of a clear and cool identification of available resources in terms of people, time, hard/software and money.
- Before data collection: have a clear plan for the amount of data that will be collected, and how they will be managed.
- If the work is farmed out: what is important in the formulation of contracts to make them watertight (for example concurrent quality control - coverage - timing).

The chapter will also contain suggestions for further reading on the subjects. In particular it is deemed useful to read critical articles about previous studies. If at all possible, the investigator-in-spe would try to

discuss directly with persons who have previous experience in population-level investigations.

9. The use and misuse of RDAs (RDIs) (Haraldsdottir and Wheeler)

RDAs are frequently used improperly to evaluate findings of above. Also dietary guidelines have to be used in a sensible way as instruments for dietary change. Limitations and possibilities will be discussed.

10. Household expenditure/consumption surveys in Europe:

what is available from each country? A qualitative overview, based on reports from the countries.

(Responsible: Alan Kelly)

11. List of addresses:

FAO data and household budget surveys, if possible also national food balance sheets.