ANNEX IX

Short reports of the bilateral working sessions

Report on the Bilateral Meeting between Germany and the Coordinating Centre

Athens, 29-31 May 2003

The 1993 and 1998 datasets were sent to the coordinating centre, prior to the bilateral session. The main objective of the session was to confirm the data reading and to draft the first food and socio-economic classifications. Discussions were also referring to the methodology for estimating nutrient availability, which is applied to the German data by the participating centre. Lastly, Dr. Gedrich presented to the Athens DAFNE team the EVA survey, undertaken in 1998 with the aim to collect information on meals taken out of the household. Given the importance of the issues raised, it was decided that two special sessions on nutrient estimations and meals taken out of the household, respectively, will be included in the agenda of the second plenary meeting.

During this first meeting, the preliminary version of the food and socio-economic classifications were prepared. These versions were included in the first interim report of the DAFNE IV project.

BILATERAL SESSION
UNIVERSITY OF PORTO
FACULDADE DE CIÊNCIAS DA NUTRIÇÃO E ALIMENTAÇÃO (FCNAUP)
July 1st-3rd, 2003

Participants
Sara Rodrigues, FCNAUP, University of Porto
Androniki Naska Dept of Hygiene and Epidemiology, Medical School, University of Athens

In the context of the DAFNE IV project, data collected through the Portuguese household budget survey (HBS) of 2000 – 2001 will be analysed and integrated in the DAFNE database.

The aim of the session was to go through the raw data and their descriptions and further work on the food and socio-economic classifications.

Raw data

The raw (household by household) data have not yet been delivered to the Portuguese participating centre. Given however the strict timetable to finalise data integration and preliminary analysis by October 2003, the Portuguese Statistical Office will be contacted, seeking for the datasets to be provided at their earliest convenience.

In order to proceed as quickly as possible, the datasets should preferably have the following format:

- Each line should refer to each participating household
- Food units should be grams (or kilograms) and millilitres (or litres), depending on the nature of the foodstuffs.If however this requirement cannot be met, explicit information is needed on the foods´measurement units.
- Availability values should be provided on the daily basis. If however, this provision is not feasible, detailed description of the reference period should be included.

The minimum of variables required for a dataset to be included in the DAFNE databank are:

General information

- household identification number
- trimester of participation

Nutritional information (purchases, own production, gifts and any other type of food acquisitions)

- food code
- type of acquisition per each food code (e.g. purchase, own production, gift etc)
- total food expenditure
- expenditure per food item
- quantity per food item

Socio-economic information

- degree of urbanisation of the household´s residence area, e.g urban, semi-urban and rural
- population of the household´s area
- population density of the household´s area
- name of the geographical area
- age and gender of the household members
- relationship of the household members with the household head
- household disposable income (net income)
- household total expenditure
- occupation/employment status/ economic activity of household head and members
- education of household head and members
- income of household head
- medical expenses data

Since the provisional list of variables recorded in the survey was available in the participating centre, work during these two days was primarily aiming at developing the DAFNE classification schemes. Furthermore, work was also undertaken in relation to describing and translating the variables that age going to be directly used.

Food classification scheme

It was noted that the food codes included in the list were based on the HBS-COICOP (EUROSTAT) classification scheme. Nevertheless, the information provided through these codes is of more aggregated nature, in comparison to the level of detail available through the previous HBS datasets.

To clarify the situation, the Portuguese Statistical Office was contacted and we were informed that food quantities will be provided according to a detailed scheme which does not substantially deviate from the one used in the Portuguese 1995 HBS (analysed in the DAFNE III project).

Classification of the socio-economic indicators

Locality: The variable rur_urb of the PT2000_hh, file can directly be used for the classification of the household´s locality under rural, semi-urban and urban.

Sara will ask the Statistical Office about details on the criteria applied for classifying households under this variable.

Education of the household head: In the PT2000_ind file, there are two variables that can be used for the education classification. The first (inst_com) refers to the level of education each individual has completed and the second (inst_fre) refers to the education level an individual currently attends.

We run several logical controls in order to understand the nature of the variables and the information each convey, and we noted the following:

The number of participating households in the Portuguese 2000 HBS amounts to 10,020. From these, the heads of 91 households are still studying. From these 91 households, the heads of 7 are currently following some professional education (inst_fre code =11). This code however cannot be considered as an indicator of their educational attainment, since, as we observed, it includes individuals from various educational backgrounds who currently follow a professional training (e.g a computer skills programme). We have decided that these 7 households will be classified according to their completed educational level. Hence, 84 households (91-7=84) will be classified according to their current educational level and the remaining 9,936 households will be classified according to the educational level already achieved.

Thus the classification scheme is the following:

DAFNE groups for education of the household head	**Competed education level (inst_com) 9,936 households**	**Current education level (inst_fre)** 84 households**
Illiterate/Elementary*	1. No education	
	2. 4 years of schooling	2. 4 years of schooling
	3. 6 years of schooling	3. 6 years of schooling
Secondary	4. 7-10 years of schooling	4. 9 years of schooling
	5. Secondary general school (11-12 years)	5. Secondary general school (10-12 years)
	6. Secondary technical school (11-12 years)	6. Secondary technical school (10-12 years)
Higher	7. Higher technical school	7. Higher technical school
	8. University – Bachelor degree	8. University – Bachelor degree
	9. University - Masters degree	9. University - Masters degree
	10. University PhD	10. University PhD
		11. Other professional education***

* Since illiterate individuals are also included in code 1 of the inst_com variable, we considered appropriate to describe the first DAFNE group as *Illiterate/ Elementary education.*
** Code 1 of the variable inst_fre is labelled as *Kindergarden.* As expected no household head was classified under this value and it is thus not considered.
*** The household heads classified under this value will be grouped according to their completed educational level.

Occupation of the household head: In the PT2000_ind file, two variables are available and can be used for the classification of occupation. The first (cpt_act) refers to the individual´s current occupational status and the second (prof2) refers to the individual´s profession.

The classification scheme is the following:

DAFNE groups for occupation of the hosuehold head	Profession of household head (PROF2)	**Current occupation (CPT_ACT)**
Manual	Codes 61,62, 71, 72,73,74,81,82,83,91,92,93	1. Employed 2. Employed, but temporarily out of work
Non-manual	Codes 11,12,13,21,22,23,24,41,51,52 PROBABLY Also codes 31,32,33,34 (**TO BE CHECKED**) *01 (**TO BE CHECKED**)	1. Employed 2. Employed, but temporarily out of work
Retired		7. Retired
Others (students, housewives, unemployed and invalid persons)		3. Unemployed 4. Military service 5. Students 6. House working 8. Incapable of work 9. Others, not active

* In the cross-tabulations we run, we noted some household heads been classified under code 10 of the PROF2 variable, although such a code does not exist in the file description. Sara will contact the Statistical Office to clarify the situation.

THE ABOVE CLASSIFICATION SCHEMES SHOULD BE CONSIDERED AS PRELIMINARY AND FINAL APPROVAL IS EXPECTED FROM OUR PORTUGUESE COLLEAGUES.

Household Composition: For classifying the households according to their composition, two variables are required: the number of household members and their age. The first variable is available in the file PT2000_ind and is called AGIND. However, the age of the household members is given in specific categories in the variable idade_e. More specifically:

IDADE_E

1. < 5 yrs	7. 30-34 yrs	13. 60-64 yrs
2.5-9 yrs	8. 35-39 yrs	14. 65-69 yrs
3. 10-14 yrs	9. 40-44 yrs	15. 70-74 yrs
4. 15-19 yrs	10. 45-49 yrs	16.> 75 yrs
5. 20-24 yrs	11. 50-54 yrs	
6. 25-29 yrs	12. 55-59 yrs	

The main concern is code 1, which refers to the range of 15-19 years of age and it includes the cut-off point of adulthood (18 years).

There are however some additional information that may facilitate the classification process.

a) According to the methodology of the Statistical Office, no person below 18 years can be considered as a household head. There are two single households, whose heads belong in this age group. Therefore, for these two we can safely argue that they are above 18 years of age (and therefore adults).

b) Current educational level (variable inst_fre) can additionally provide information. So those individuals ages 15-19 years and following University studies should be considered above 18 years, since there are no provisions for entering the University below the age of 18 years. All the others should be considered as children.

   We have checked the frequency of variable inst_fre and we noticed that, as expected the majority of individuals aged 15-19 years follow secondary education.

In the PT2000_hh file there is a variable TIPO_ADP which provides information on the type of the household and can be used supplementary to clarify whether individuals classified in the 15-19 years are children or adults.

TIPO_ADP

1. one individual living alone <30 years of age
2. one individual living alone 30-64 years of age
3. one individual living alone >= 65 years of age
4. couple without children (both < 65 years)
5. couple without children (at least one of them > 65 years)
6. couple with 1 child
7. couple with 2 children
8. couple with 3 or + children
9. lone parent + children
10. couple or lone parent and young people
11. other

Sara will ask for the definition of children (which age groups were considered).

DAFNE working meeting between Sweden and the Coordinating Centre, 18-20 March 2004, Athens, Greece

Participants:

Eric Poortvliet, Unit for Preventive Nutrition, Department of Biosciences at Novum, Karolinska Institutet Stockholm Sweden
Jonna Ekman, Unit for Preventive Nutrition, Department of Biosciences at Novum, Karolinska Institutet Stockholm Sweden
Androniki Naska, Dept of Hygiene and Epidemiology, Medical School, University of Athens
Eleni Oikonomou Dept of Hygiene and Epidemiology, Medical School, University of Athens

The aims of the meeting were to:

1. Clarify variable descriptions
2. Identify missing information in the Swedish datasets
3. Decide on DAFNE classifications for a number of variables

The first two aims were discussed by going through the variable listing and description, one by one, and by year. Feedback was given by the Swedish group where possible and missing information identified.

The third aim was more comprehensive and required cross-tabulation and frequency output in SPSS to verify the results. The background and rationale for the decisions are summarized below by topic:

Location
The rationale for classifying location in Sweden was discussed with respect to population density and number of inhabitants. Due to the discrepancies between the North and the South, identical categories for rural, urban and semi-urban are not used in Sweden. However, by combining the information on number of inhabitants within a certain radius and the number of overall inhabitants, it was decided to classify larger cities in the North as urban, with rural and sparsely populated areas as rural. Medium-sized cities in the South were classified as semi-urban, while the larger cities (general) and specific urban population areas were defined as urban.

Education
The main issue is the distinction between elementary and secondary education. The DAFNE categories follows the Mackenbach definition (entry at start of compulsory education and corresponds to the first 6 years of 'basic' education). Information in Sweden emphasizes whether elementary education was completed or not, and the first category corresponds to less than 9 years of elementary school, which can not be separated into more detailed levels. Therefore, it was decided only to classify the

secondary and tertiary education and leave elementary as unavailable. Elementary school completed (9-10 yrs) was classified as secondary education.

Socio-economic status

Two separate variables were used to classify SE-status, one based on type of occupation and a second on the traditional status-categories based on blue and white collar workers in different levels.

Blue collar workers (all levels) and farmers were classified as manual workers

White collar workers (all levels), company owners, people in leadership functions were classified as non-manual workers. Cross-tabulation showed that some blue collar workers responded to be company-owners. However, further specification showed that this referred (in only 3 cases) to non shareholder companies and decided not to re-classify these. Therefore it was concluded that company ownership was in agreement for both variables and no further re-classification was done.

Retired/housewife: Statistics Sweden to be contacted to check definition of retired (other age cut-off points?) and whether separate information is available to segregate these groups (such as pro-longed sick leave). It was decided that, should this information not be available, to classify those over 65 as retired

Unemployed: Cross-classification showed a reasonable amount of the unemployed considered themselves to be blue- or white collar workers. This could be due to the period of unemployment asked for and needs to be checked with Statistics Sweden.

Household composition

Logical operators were applied to number of household members and age of the household members to categorize into 9 mutually exclusive groups (one group being 'other'). Aggregation showed 100% agreement.

Validation

Six (6) random samples will be taken from both years and descriptive tables for a selected number of variables will be sent to KI and Statistics Sweden for internal validation.

Remaining issues to be clarified with Statistics Sweden:

1. EUROSTAT uses the definition 'household head'. What is the criterion Sweden uses (if any) ?
2. Are the 1989 publications on food amounts and/or expenditures for comparison purposes?
3. What does the variable 'weeknr' refer to: week 1 of the year or week of beginning of study?

4. Does the 1989 data have additional socio-economic variables comparable to the ones in the 1996 data. What about medical expenses for 1989?
5. Is there ’89 data on education?
6. Clarify the meaning of the socio-economic codes ‘aggregated’ and ‘independent of age’ in the ’89 data
7. Is there census data to compare the overall Swedish population with the sample frame in the HBS
8. Why are there 24 combinations of 4 strata variables but more than 200 different values for stratum weight? Ask again!
9. Is there information on vitamin and mineral supplements?
10. What is the definition on ‘unemployed’
11. Has Statistics Sweden or other instances ever used the classification urban, semi-urban and rural. If so, what were the criteria?
12. Check definition of retired (other age cut-off points?) and whether separate information is available to segregate these groups (such as pro-longed sick leave)

Report on the Bilateral Meeting between Germany and the Coordinating Centre

Athens, 3 – 5 April 2004

The meeting was held at the Dept. of Hygiene and Epidemiology, Medical School, University of Athens. It was structured into 4 sessions.

1. Session: Validity of German Household Budget Survey Data

The discussion focused on the following issues:

- application of weighting factors
- handling of outliers
- lack of missing data.

Given the complex nature of the weighting factors applied at a national level, it was decided to have a general discussion on their use in one of the coming plenary meetings of the project.

2. Session: Trends in Food Consumption in Germany (the German Report)

Dr. Gedrich presented the preliminary results on trends in food consumption in Germany (cf. Appendix 1). The discussion revealed the necessity of having closer looks into the consumption of the following food groups:

- potatoes (including potato products)
- added lipids
- alcoholic beverages.

The corresponding data were re-analyzed, in terms of overall means and means by the households' locality and occupation of the household head and the results were included in the revised version of the German report.

3. Session: Estimation of Nutrient Intakes

Dr. Naska and Dr. Gedrich each presented their preliminary results of estimating nutrient intakes based on HBS data (cf Appendix 2 and 3). After a discussion it was decided that the following methods of developing food composition tables for the respective HBS should closer be evaluated by both centres:

M1: nutrient contents of food groups are determined by a representative food item of the group

M2: nutrient contents of food groups are determined as simple means of all food items of the group

M3: nutrient contents of food groups are determined as weighted means of food items of the group

M3a) weights are determined by expert interviews

M3b) weights are determined from individual dietary surveys.

Final results of the comparison of the methods will be presented at the next plenary meeting in Vienna (May 2004).

4. Session: Individualization of Household Food Consumption

Dr. Gedrich presented the methodology of estimating individual food consumption on the basis of HBS data, which was developed at the German centre. After a discussion it was decided that a comparative validation of the German parametric and the DAFNE non- parametric approaches of individualization should be attempted. For this comparative analysis the data collected in the German VERA study can be used, since they refer to food intake at individual, as well as household level.

Report on the bilateral meeting between Austria and the Coordinating Centre (01. – 03. June 2004)

University of Athens, Department of Hygiene and Epidemiology, Medical School,

In the Austrian HBS_data set we observe many zero values for quantities in all food groups. We have to convert the existing food expenses into quantities to avoid underestimation of the daily food availability. Statistik Austria recommended us two approaches for converting expenses data into quantities. The bilateral meeting purposed to approve and to confirm these two approaches.

On 1st of June 04 the two approaches were checked and proved; the achieved results were discussed.
The first approach serves the purpose to avoid several zero values in food groups. Some households recorded only expenses and not quantities in case of specific food items.
Approach1 provides to apply the "price per unit weight".
The second approach purposes to calculate from the national annual production the daily availability of the specific food items.
In the Austrian HBS_survey there were not recorded quantities, but expenses in case of 17 food groups.
In the first session it was decided to apply Approach2 for those 17 food groups.

In the second session it was tried to find the factor for converting existing expenses into quantities.
We reviewed following potential factors: mean, mode, median and the German method "transforming expenditures into quantities".
We applied these factors for having examples and for comparison.
The German method showed difficulties in applying to the Austrian data set, because it implied household, which have no zero values.
It was decided that the German method it not applicable for the Austrian HBS_data set.
The sample households showed that the median of the price per unit weight is the best factor. It was decided to calculate approach1 with the median.

In the third session we examined Approach1 and Approach2 with the aid of specific food groups. Difficulties and problems of these approaches in application with the SPSS-programme were observed and solved.
The methodology of Approach1 and Approach2 were accurately proved and focused.
The accurate steps of the methodology can be read in the added methodology-protocol.
In the next week we are expecting missing units of specific food groups from Statistik Austria.

The published Statistik Austria_results of expenses were brought to the Coordinating Centre for validation.

The bilateral meeting in the Coordinating Centre focused Approach1 and Approach2 and confirmed the implementation.

METHODOLOGY OF CONVERTING EXPENSES INTO QUANTITIES

Approach 1: converting expenses by the price per unit weight to replace zero values
Approach 2: converting national annual production quantites into household level quantities

Approach 1

1.) Excluding zero values
We exclude all the households, which specified zero-quantities for the specific food item.
We select all households which had recorded quantities for the food items (excluding the households with zero values)
In case of poultry (Code 112400) we have 3155 households with recorded quantities and 479 households with missing quantities.

2.) We find the “price per unit weight” using the recorded quantities of 3155 households.
We create the new value n_112400 for the “price per unit weight” for each household.

n_112400=c_112400/f_112400
We divide the specified expenses of poultry by the recorded quantities of the 3155 households.
Now we calculate the median of n_112400 to get the expected average “price per unit weight”.

We estimate quantities for those households, which have specified zero consumption (479 hds). We transform the recorded expenses of those 479 households into quantities using the calculated median (W_111100).
W_111100=c_111100/median

3.) We replace zero values.
We sum up the quantities of 3155 hds and the calculated quantities of 479 hds.
R1_111100=F-111100+W_111100

We divide R1 by the number of household members to get the mean availability per person per day.
We weight it by the national weighting factor (Gewicht) to be able to compare the result with the published result of Statistik Austria.

We noticed that the results are close to the published results Statistik Austria; on this basis we can accept **Approach 1.**

Approach 2

In the Austrian HBS-data file are 17 food groups, which were only recorded in expenses.
In case of these food groups Statistik Austria recommended us to calculate quantities from an external source (national annual production) and the recorded expenses.
The national statistical office advised us the following formula for the calculation.

1.) We calculate the daily availability (new2) from the national annual production (ann_pr).

new1 = ann_pr/12
new2= new1/30

In the Austrian HBS are 7098 households, which participated the survey.
In the time of data collection there existed 3241338 households in Austria.

We divide variable new2 by the total number of Austrian households and multiply by the number of HBS-households.
new3= new2/3241338
new4= new3*7098

Now we divide new4 by total expenses of all survey-households.
new5= new4 / total expenses

We multiply new5 by the expenses of the specific household for the specific food item (c_food_i).
new6= new5 * c_food_i

We convert the unit in tons into grams.
new7= new6 * 1000000

We divide new7 by the number of household members to get the mean availability per person per day.

On the basis of the fact that Statistik Austria did not record quantities, but expenses for these food groups, there are no published HBS_quantitiy data for comparison. We compared the results of approach2 with Austrian_Intake_data and we observed that they are very close.
The aforementioned formula is officially recommended and approved by Statistik Austria.
On this basis we can accept **Approach 2**.

DAFNE working meeting between Sweden and the Coordinating Centre, 28-29 July 2004, Athens, Greece

Participants:

Eric Poortvliet, Unit for Preventive Nutrition, Department of Biosciences at Novum, Karolinska Institutet Stockholm Sweden
Androniki Naska, Dept of Hygiene and Epidemiology, Medical School, University of Athens
Eleni Oikonomou Dept of Hygiene and Epidemiology, Medical School, University of Athens
Vassilis Foukas, Dept of Hygiene and Epidemiology, Medical School, University of Athens
Rea Dania, Dept of Hygiene and Epidemiology, Medical School, University of Athens

Aim of the meeting:

1. to finalize the comparison of food aggregation tables between the DAFNE and Swedish HBS systems
2. to discuss the oustanding issues regarding:
   a. data provision
   b. data reading
   c. data validation
   d. conversion of expenses to quantities
   e. classification of socio-economic status
   f. comparison of database figures with published results
3. to discuss financial issues

Meeting minutes:

1. Food aggregation tables

Pending food codes were clarified in discussions, remaining issues are:

HBS1989	The proportion of dried and canned soups for code 413
	The proportion of juices, other than citrus, carrot, tomato and beetroot into fruit and vegetable juice
	The proportion of pasta in ready to eat pasta dishes
HBS 1996	The proportion of egg in egg-dishes

The tables were checked and minor mistakes were corrected

2a. Data provision

- The issued of household head was discussed, and it was agreed to use the SE-household status from 1989 data and apply this to the 1996 data.

- Sweden is to confirm rules that have been used to identify SE status of the household from individual members of the household

- Identification of the household head (highest status person) would then be used to identify household head ‘ educational status’

- Sweden to provide data on the percentage of manual and non-manual workers for validation purposes

- It was decided to classify farmers according to the Norwegian database (manual)

- Information on inhabitants per location needs to be confirmed

2b Data reading

- Zero values in the 1989 database (non-applicable) will be replaced by the Athens team into missing values, except for true zero missing values (i.e age =0)
- Duplicate coding for identical foods was discussed: these should be summed to give the total amounts
- Sweden will double check whether stratum weight is the correct variable to use for weighing (written confirmation from Statistics Sweden)

2c Data validation

New sample files will be sent to to Sweden for validation

2d Conversion of expensed to quantities

- An updated Excel file will be sent from Sweden to Athens with missing information on food prices and proportions in the HBS 1996, except for those classified as ‘unspecified’
- The sum of all food expenditures needs to be cross-checked with a separate variable identifying total expenditure, as it is the experience from other DAFNE countries that are NOT identical. Sweden to check with Statistics Sweden

2e See 2a

2f Comparison of database figures with published results

Copies of the published figures for HBS 1989 and HBS 1996 were made for the Athens team. Sweden to provide and Excel file indicating which database food codes correspond to the published food groupings with an English translation for the foods and food groups.

3. Financial issues

Detailed invoices and cost statements need to be received by Athens as soon as possible. Information was provided by Rea Dania on how to proceed upon return to Sweden

Report on the Bilateral Meeting between Germany and the Coordinating Centre

Athens, 16-28 September 2004

Workplan

The session was scheduled in order to develop a manuscript related to estimating the types and the quantities of foods and beverages consumed when eating out using data collected through the HBS. The paper entitled "*Food Consumption Away-From-Home: An Estimation Based on German Household Budget Survey Data"* by Gedrich K, Naska A, Wagner K, Trichopoulou A, Karg G was submitted for publication to the British Journal of Nutrition.

During the session, the approaches for estimating the daily nutrient availability from the HBS food data were extensively reviewed and validated. The conclusions were presented in the final plenary meeting of the project (Munich, December 2004). A manuscript presenting the methodological approach for monitoring the daily nutrient availability, using the DAFNE databank is currently under preparation.

BILATERAL SESSION - DAFNE IV project
UNIVERSITY OF ATHENS - Medical School –
Dept of Hygiene and Epidemiology
December 12th-17th, 2004

Participants

Sara Rodrigues,
Faculty of Nutrition and Food Science, University of Porto
Androniki Naska,
Dept. of Hygiene and Epidemiology, Medical School, University of Athens

Aims

The session was scheduled in order to develop two manuscripts related to monitoring trends on food availability in Portugal and to estimating nutrient intakes based on the DAFNE Portuguese data.

Household food availability in Portugal – an evolution from 1990 to 2000

The first draft of the above mentioned manuscript, with a comprehensive view on trends in household food availability and socio-demographic disparities in Portuguese food habits from 1990 to 2000 was prepared and will be submitted to publication during January 2004.

Household nutrient availability in Portugal – an evolution from 1990 to 2000

The aim of this manuscript is to estimate the daily availability of selected macro and micro nutrients derived from the Portuguese HBS and to look for its national trends between 1990 and 2000.

Several possible methodological approaches for converting HBS food codes into nutrient were deeply discussed:
M1 - Definition on the basis of the most representative food item in the code;
M2 - Definition on the basis of equal contribution of all food items classified under the code (unweighted mean);
M3 - Definition on the basis of the contribution of each food item in the code (weighted mean), either by
A - Contribution estimated by various sources (expert group, FBS, marketing data, etc.), or
B - Contribution estimated through individual nutrition data.

The Greek and German previous experience on this issue showed that the most consistent method would be to estimate nutrient household availability on the basis of the M3 approach. As Portugal has no up to date national representative data on individual food consumption data it was decided to apply the M3A methodology for estimating the nutrient contribution by using various sources .

The English food composition table (5th edition) and its Supplements together with the Portuguese food composition table were used in order to find out corresponding nutritional data for each HBS food code.

Due to the extent (≅500) and particular nature of the food codes used in the Portuguese HBS data collection and also because of the small number of foods included in the Portuguese food composition table and the absence of cooked foods, the task of finding corresponding data in the currently used food composition tables was neither easy nor quick.

Even tough, for the majority of the HBS food codes a corresponding nutritional composition code could be settled, it is necessary to go further on by researching on food labelling contents, marketing figures. Data from individual food consumption surveys collected addressing specific research purposes in sub-samples of the Portuguese population might also be considered.