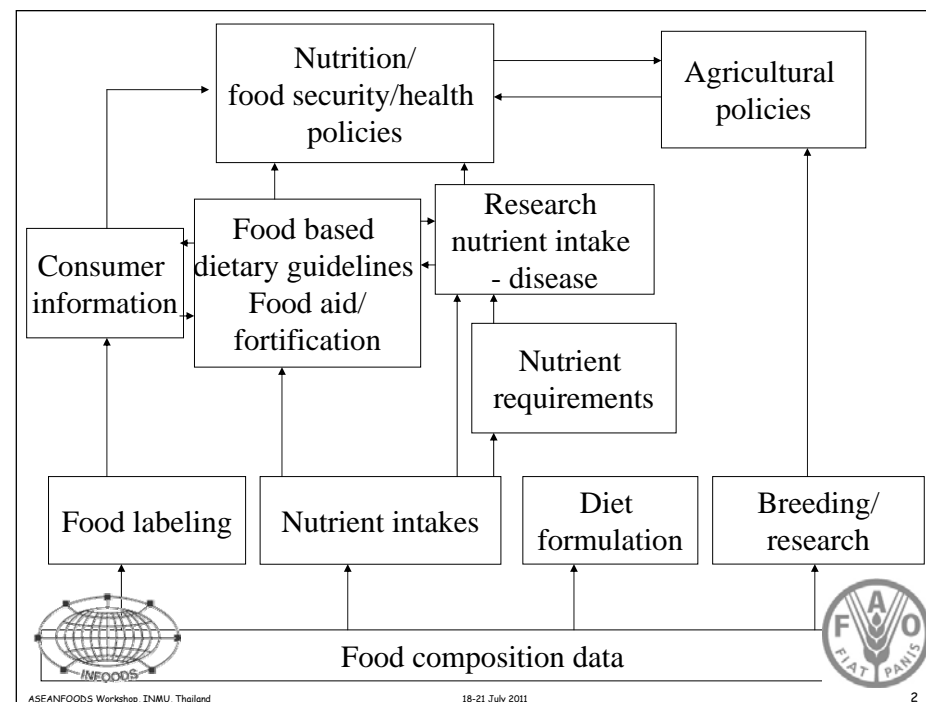


INFOODS/FAO Food Composition Study Guide: a distance learning tool also for formal education

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Shift in learning

Face to Face (teacher-driven)
On Food composition

- 550 professionals trained in courses since 1992
- limited coverage in formal training



Distance Education
(student-driven)

- Increasingly used in formal training (e.g. universities) and on-the job training
- does not exist yet for food composition
- only means for many to obtain knowledge

Food Composition Study Guide developed by FAO/INFOODS

Objectives

- To reach a wider audience cost-effectively, which otherwise would never be served
- To assist learners to fill their specific knowledge gaps and assess their knowledge acquisition
- To assist learners to perform better when generating, managing or using food composition data
- To assist teachers to prepare lessons and test students

Target Population

- self-learners, FoodComp courses, universities: compilers and users and also analysts; teachers and students



17 Modules

- Basic principles of a food composition programme
- Use of food composition data
- Selection and nomenclature of foods in FCDBs
- Components in FCDBs
- Component selection
- Component nomenclature
- Component conventions and units
- Methods of analysing components
- Sampling
- Quality aspects of analytical data
- Resources concerning food composition and publishing food composition information
- Calculations of missing data and recipes
- Database management systems, metadata and data interchange
- Compilation and documentation
- Additional exercises on comparing and compiling data from other food composition databases
- Additional exercises on translating food intake to nutrient intake
- Quality considerations in data compilation
- Biodiversity

17 modules

Cover all areas of food composition and include biodiversity
Structure of each module

- (1) Learning objectives
 - (2) Required reading, exercise material, resources, relevance for compilers/professional users or analysts, estimated time
 - (3) Questions (mostly closed questions)
 - (4) Exercises
-
- (5) Answers to questions
 - (6) Expected answers to the exercises
 - (7) General feedback using self rating

Example of a question (1)

IVc.Q6 Is it advisable to copy energy values from one food composition data source to another? Select the correct response. (1 point)

Answer:

	Copy energy values
	Yes, because all food composition databases use the same energy conversion factors.
	No, because all food composition databases use the same energy conversion factors and may have different macronutrient values.
x	No, because food composition databases may use different energy conversion factors and may have different macronutrient values.

For your information:

The energy values to be published should always be calculated within the own food composition database. They should never be copied from other sources (except for comparison) because the different energy calculation systems used in the different sources can have a significant impact on the energy value. This is the golden rule about generating energy values in a food composition database.

Examples of a question (2)

III.Q5 Food groups are defined differently in different countries and regions. Name nine generally accepted or widely-used food groups. (4.5 points – ½ point for each correct response)

Answer (see pp. 36-39):

You should have listed nine of the following 13 most used food groups:

- Cereals and cereal products
- Starchy roots and tubers and their products
- Legumes and their products
- Vegetables and their products
- Fruits and their products
- Sugar, sweets and syrup
- Meat and poultry and their products
- Eggs and their products
- Fish and their products
- Milk and their products
- Fat and oils
- Beverages
- Miscellaneous

For your information:

Many food composition databases also use subgroups, e.g. for cereals and their products: Grains and flours; Breads; Pasta; Prepared foods; Tortillas; Sweet biscuits; Savoury biscuits; Cakes; Doughs; Crispbread; Breakfast cereals

Food groups are often merged into one if only few foods of several food groups are consumed, e.g. 'meat, poultry, fish and their products'. Other countries add specific food groups because of the high consumption or importance of specific foods in their diet, such as coconut products in the Pacific Islands.

Example of an exercise (1)

III.E1 Match the foods from the sample survey below with the foods found in the food composition table, also given below. In some cases, several foods from the food composition table can be matched to a single food in the survey, e.g. tea with milk and sugar = 1 + 2 + 3. (10 points: 1 point for each correct response)

- | | |
|--|---|
| <p><i>Foods from the food consumption survey:</i></p> <ul style="list-style-type: none">• a. Tea with milk and sugar• b. Pork chop, grilled, the visible fat not consumed• c. Chicken breast, roasted, skin not consumed• d. Tomato, grilled• e. Aubergine (eggplant), fried in olive oil• f. Rice, red, fried• g. Rice, white, boiled• h. Mutton in sauce• i. Mixed vegetables, boiled• j. Mango, dark orange flesh, very ripe• l. Mars bar | <p><i>Foods found in the national food composition table:</i></p> <ul style="list-style-type: none">• 1. Tea• 2. Sugar• 3. Low-fat milk• 4. Standard milk• 5. Fortified semi-skimmed milk• 6. Milk powder, full fat• 7. Pork, lean• 8. Pork, medium• 9. Pork, fat• 10. Chicken• 11. Chicken, dark meat• 12. Chicken, light meat• 13. Chicken, grilled• 14. Chicken, grilled, bones in• 15. Mutton, fat• 17. Tomato• 18. Aubergine (eggplant)• 19. Vegetable oil• 20. Rice• 21. Rice, boiled• 22. Spinach• 23. Carrot• 24. Mango• 25. Tap water• 26. Chocolate bar |
|--|---|

Dissemination

- **2 volumes:** Questions and exercises, and Answers
- **Published** in English, French and Spanish on INFOODS website
http://www.fao.org/infoods/publications_en.stm
- In the future
 - as printed workbooks
 - CD

Compilation tool developed

A Compilation tool needed to be developed to allow learners to exercise and understand:

- Component identification
- Recipe calculation
- Documentation
- Compilation

→ in Excel, as more learners know Excel than sql or Access

→ At http://www.fao.org/infoods/software_en.stm

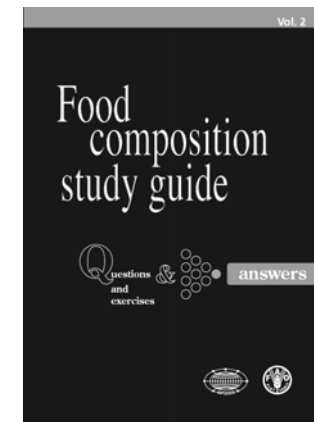
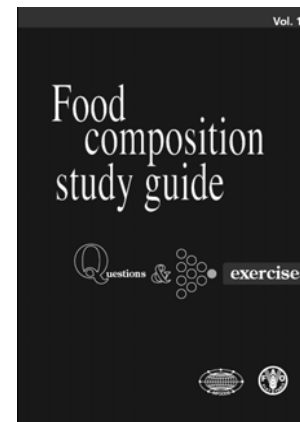
Experience in using Study Guide

- in food composition courses (Bratislava, Wageningen, Iran, Benin, Ghana, Pretoria, FAO)
- in University of Vienna (3 courses)
- as self-learners (e.g. FAO, University of Pretoria)
- Comprehensive, easy to understand, exercises show what understood, easier to follow course but time-consuming
- PPT useful to prepare course and to shorten reading

Conclusion

- Reaching a wide audience cost-effectively in 3 languages (English, French and Spanish)
 - Students can choose modules of interest, time, place and repeat if necessary
 - Comprehensive and standardized content
 - Various applications (self-learners, universities, FoodComp courses)
 - Excellent feed-back from users, especially on deepening understanding, application of knowledge, and gain of self-confidence
- ➔ And first tool to allow universities to teach food composition easily, comprehensively and in a standardized way

Try it out and distribute widely:
http://www.fao.org/infoods/publications_en.stm



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