

Food Comp Australia/OCEANIAFOODS2009

This course introduces the content and methods of food composition as an essential component of nutritional science.

At the end of this course, you should be able to:

- 1) appreciate the role of a sound knowledge of food nutrients (and other bioactive components) in the science of nutrition, particularly in studies of diet and health, reproduction, growth and development; and in the assessment of the value of foods consumed by individuals and populations, and in the planning of food and nutrient supplies at various levels
- 2) better understand the effects of environment, agriculture, food storage & handling, preparation and processing on food nutrients
- 3) better understand the application of nutrient composition data in food standards, in the food industry, in food and nutrition policy, in agriculture, in nutrition information and education, and planning of food and nutrient intakes
- 4) recognize the role of scientific method in food composition work, particularly the importance of appropriate sampling schemes, accurate food identification, appropriate analytical methodology, analytical quality control, food composition database compilation and quality control of the compilation process.
- 5) develop planning skills for food composition programs in a variety of national and international contexts
- 6) plan targeted information searches by recognizing the need for information, and by locating, evaluating, applying and documenting relevant information effectively
- 7) think more critically about the information presented throughout this course. This includes an ability to identify and query assumptions, critically evaluate research methodology and results, assess conclusions, as well as to compare and contrast competing perspectives. Problem solving and practical learning skills will be emphasized.

Course Components

This course consists of **four main subdivisions**:

- a **lecture** component – at least one hour-long lecture session per weekday
- a **practical** component involving working on relevant calculations or problems, and visits to food enterprises
- a **working group** component: there will be at least one session per weekday in assigned groups to work on specific topics. In addition work on a major group project throughout the course will be assigned.
- a **presentation** component: a presentation at the beginning of the course on a food composition related project in which you have been or are involved, as a 10 minute Powerpoint presentation to the class. In addition final presentation of results of group projects also as Powerpoint.

There will be no laboratory work in this course but some laboratory tours will be involved.

Textbook

The textbook for this course is:

Greenfield, H. & Southgate, D.A.T. (2003) Food composition data. Production, management and use. 2nd ed. Rome: FAO. English language copies will be provided free-of-charge to all participants. (It is also available on line at: http://www.fao.org/INFOODS/publications_en.stm)

Course principles

This course will adhere to the principles espoused by the University of New South Wales in providing an environment that fosters in students:

- the skills involved in scholarly enquiry
- an in-depth engagement with the relevant disciplinary knowledge in its interdisciplinary context
- the capacity for analytical and critical thinking and for creative problem-solving
- the ability to engage in independent and reflective learning
- information literacy - the skills to appropriately locate, evaluate and use relevant information
- the capacity for enterprise, initiative and creativity
- an appreciation of, and respect for, diversity
- a capacity to contribute to, and work within, the international community
- the skills required for collaborative and multidisciplinary work
- an appreciation of, and a responsiveness to, change
- a respect for ethical practice and social responsibility
- the skills of effective communication.

Course Requirements

The basic requirements of this course are as follows (see timetable):

1. To attend every class day
2. To attend and contribute to daily working groups
3. To participate in major project working groups during the day and also after-hours
4. To complete literature evaluation sessions as scheduled
5. To participate in laboratory tours and other visits
6. To present a Powerpoint presentation on a food composition project on which you are working or have worked
7. To participate actively and individually in a group presentation at the end of the course
8. To complete course evaluations at least twice during the course

Assessment

Certificates will be awarded to all participants who complete the course satisfactorily in terms of attendance at course, level of participation in group work, performance in exercises and in presentations during the course. Grades will not be awarded.

Participants will receive feedback and be counselled at intervals. Assessment will be conducted by BB, PP, AS and BA by observation of participation during all course components.

Computers

Access to computers will be provided. Participants are encouraged to bring their own laptop computers, if they have one.

Course information

Additional course details, information and exercises will be posted on the Course website.

Teaching Faculty and other facilitators

Core Teaching Faculty (confirmed)

Name	Position	Expertise for course
Prof. Bill Aalbersberg PhD	Director, Institute of Applied Sciences, University of South Pacific, Fiji	Over 20 years of experience in regional training and analytical programs for food pesticides, contaminants, nutrients.
Dr Jayashree Arcot, PhD	Senior Lecturer, Food Science and Technology, University of New South Wales, Australia	Expertise in food analysis, including microbiological methods. International expertise in folate determination. Teaching experience in food nutrients.
Dr. Barbara Burlingame PhD (Week 2)	Group Leader, Nutrient Requirements and Assessment/INFOODS Director, FAO, Rome, Italy	Taught on other FAO training programs in food composition Expertise in compilation.
Dr Heather Greenfield, PhD	Adjunct Professor, UNSW and USydney, Australia	Expertise in running food composition programs, co-author of course manual. Taught on other FAO training programs in food composition
Dr Prapasri Puwastien, PhD	Institute of Nutrition, Mahidol University, Thailand	Ran FAO training program in food composition in Bangkok, taught on other training programs in food composition, involved in Asiafoods, ASEANfoods, expertise in analysis of food nutrients, reference materials and collaborative trials
Dr Ashok Shrestha, PhD (Week 1)	Postdoctoral Fellow, University of Queensland, Australia	Expertise in analysis of food nutrients and other food factors in Nepal, Thailand and Australia

Other teaching faculty

Staff members	National Measurement Institute	Food components analysis, collaborative trials, reference materials
Melissa Armstrong	Diabetes Centre, St Vincent's Hospital, Diabetes Centre, Sydney, Australia	Clinical dietetics
Laurie Besley	Chief Metrologist and CEO, National Measurement Institute, Australia	Metrology
Isabel Castanheira	EuroFIR/Institute of Food Safety and Nutrition, INSA, Lisbon, Portugal	Reference materials, quality control of compilation
Coral Colyer	National Heart Foundation, Australia	Experienced data user in industry, public health, dietetics
Judy Cunningham	Food Standards Australia New Zealand (FSANZ), Australia	Food standards, program management, compilation, analytical expertise in food nutrients
Veronique Droulez	Meat and Livestock Australia, Australia	Experienced data user in industry, dietetics
Karen Fukofuka	Secretariat of the Pacific Community, New Caledonia	Pacific Islands expertise, experienced user, dietetics
Viola Lesi	Institute of Applied Sciences, University of South Pacific, Fiji	Laboratory accreditation
Brynn Hibbert	Professor of Analytical Chemistry, UNSW, Australia	Metrology, traceability
Lucy Lesperance	Plant and Food Research, New Zealand	Program management, compilation
Neil Mann	RMIT University, Melbourne, Australia	Fatty acids analysis, compilation
Dorothy Mackerras	FSANZ, Australia	Nutritional epidemiology, public health nutrition, dietetics
Grainne Moran	Director, Analytical Centre, UNSW	Laboratory management, minerals analysis
Shyamala Vishnumohan	Doctoral graduate, UNSW	Folate analysis methodology
Mike Williams Chester Goodsell	Serve Xyris	User software providers