

INFOODS

Dr. Ruth Charrondiere

INFOODS, FAO, Rome, Italy

The International Network of Food Data Systems (INFOODS) was established in 1984 on the basis of the recommendations of an international group convened under the auspices of the United Nations University (UNU). Since 1990, FAO has taken an active role in INFOODS and since 1999 served as coordinator. INFOODS is also one of the Task Forces of the International Union of Nutritional Sciences (IUNS). Its goal is to stimulate and coordinate efforts to improve the quality and availability of food analysis data worldwide and to ensure that anyone anywhere would be able to obtain adequate and reliable food composition data. In furtherance of these purposes INFOODS has provided leadership and administrative framework for the development of standards and guidelines for collection, compilation, and reporting of food component data. It has established and is coordinating a global network of regional data centers directed toward the generation, compilation and dissemination of accurate and complete data on food composition. It is also the generator and repository of special international data bases and serves as a general and specific resource for persons and organizations interested in food composition data on a worldwide basis. INFOODS has developed the necessary software for the electronic storage of food composition data and interchange among data bases. INFOODS' effort is intrinsically interdisciplinary, depending on the efforts of food scientists, analytical chemists, and nutritionists working together with computer and information scientists.

INFOODS and FAO are currently promoting food biodiversity and the collection of compositional and food consumption data at variety, cultivar and breed level, as well as data on wild and underutilized foods. Through this approach it is hoped that food biodiversity will be mainstreamed in nutrition programmes and policies. The CBD (Convention on Biological Diversity) Cross-cutting Initiative on Biodiversity for Food and Nutrition was established in 2006 as a response to an emerging global consensus that (1) the simplification of diets, the growing incidence of chronic diseases related to nutrition-poor, energy-rich diets and the decline in the use of locally available foods are linked; and that (2) biodiversity is the source of many foods and dietary components that can reverse this unhealthy trend. As scientists and policymakers recognise that food biodiversity is essential for food and nutrition security and that it can make a major contribution to the achievement of the Millennium Development Goals, it is now becoming a feature in nutrition programmes and interventions. The increase in the number of relevant foods reported by food composition databases and in food consumption surveys in recent years indicate that governments, researchers, farmers, the food industry and consumers are becoming more aware of the role that biodiversity plays in nutrition. This increase can be expected to lead to greater conservation and sustainable use of biodiversity, to improve food and nutrition security (FAO 2008; FAO 2010).

Milestones in the work of INFOODS/FAO are: **Standard setting and guidelines**

- Component identifiers also called tagnames. This work started at the beginning of INFOODS (Klensin et al., 1989) and regular updates are published on the INFOODS website http://www.fao.org/infoods/tagnames_en.stm. In 2003, a technical meeting further elaborated the tagname concept (INFOODS, 2003). Now there are over 800 INFOODS component identifiers. EuroFIR and INFOODS agreed in 2009 to collaborate and harmonize their systems of identifying food components

- Complementary to the component identifiers, a standard description for food nomenclature was published (Truswell et al., 1991)
- Also the work on Interchange of food composition data started early (Klensin 1992) and was further elaborated in 2003 (FAO, 2004)
- Guidelines on compilation of food composition data were published to assist countries to harmonize their compilation process (Rand et al., 1991)
- New energy conversion factors were proposed (FAO, 2003)
- INFOODS Food matching guidelines (FAO/INFOODS, 2011) will guide users on how to match food consumption data to foods in food composition databases/tables in order to obtain nutrient intake estimations. They are available in English at http://www.fao.org/infoods/projects_en.stm.

Declarations

- AFROFOODS declaration (2010). It is available at: <http://www.fao.org/infoods/AFROFOOD%20CALL%20and%20APPEL.pdf>
- Bangkok Declaration (2009) from the 8th International Food Data Conference. It is available at: <http://www.fao.org/infoods/Bangkok%20Declaration.final.doc>

Publications

- W.M. Rand, C.T. Windham, B.W. Wyse, V.R. Young. (1987). Food Composition Data: A User's Perspective. United Nations University, Tokyo. Available at http://www.fao.org/infoods/publications_en.stm
- H. Greenfield and D.A.T. Southgate 'Food Composition Data – production, management and use'. It was published in 2003 in English, in Spanish in 2006, in French in 2007 and 2008 in Korean. The books can be downloaded free of charge from the INFOODS website.
- Journal of Food Composition and Analysis (JFCA) was the official INFOODS journal from 1987 to 2010.
- H. V. Kuhnlein, O. Receveur, R. Soueida and G. M. Egeland. (2009). Indigenous Peoples' food systems: the many dimensions of culture, diversity and environment for nutrition and health. FAO/CINE. It can be downloaded free of charge from the FAO website: <http://www.fao.org/docrep/012/i0370e/i0370e00.htm>
- Over 20 scientific articles

Capacity development

The list of previous courses and participants is as well as new courses are published at the INFOODS website http://www.fao.org/infoods/training_en.stm

- Involved in and/or co-organized over 20 international training courses on food composition since 1992:
 - 9 courses held in Wageningen, the Netherlands, by the Graduate School VLAG (Advanced Studies in Food Technology, Agrobiotechnology, Nutrition and Health Sciences) and the Division of Human Nutrition of Wageningen University in collaboration with partners including UNU (United Nation University), FAO (Food and Agriculture Organization of the United Nations), COST action 99/ EUROFOODS, IUNS (International Union of Nutrition Societies), and recently also with EuroFir (European Food Information Resource Network)
 - 12 regional courses: 3 in Latin America (Chile in 1995, Argentina in 1996, Jamaica in 2001); 5 in South Africa (1997, 1999, 2002, 2005 and 2010), 2 in Asia (Thailand in 2002 and India in 2006), 1 in Europe (Slovakia in 2008) and one in Oceania (Australia 2009).
- FAO/INFOODS organized several training courses
 - international course in the Near East (Iran in 2008)
 - 2 international courses in West Africa in 2009 (in Benin in French and in Ghana in English) in collaboration with Bioversity International

- 4 training courses of 1-2 days for delegations of Mozambique, Palestine, Sudan and for FAO staff
- 3 courses at the University of Vienna, Austria, in 2008,2009 and 2011
- Publication of the distance learning tool 'Food composition Study Guide' (Charrondiere et al., 2009 and 2009b) in 2009 (updates in 2010 and 2011) in English and 2011 in French and Spanish. It is available free of charge at the INFOODS website: http://www.fao.org/infoods/publications_en.stm for the English, http://www.fao.org/infoods/publications_fr.stm for the French (Charrondiere et al., 2011a and 2011b) and http://www.fao.org/infoods/publications_es.stm for the Spanish version (Charrondiere et al., 2011c and 2011d). The Study Guide is accompanied by 12 PowerPoint presentations summarizing the main points of some modules, also in English (http://www.fao.org/infoods/index_en.stm), French (http://www.fao.org/infoods/presentations_fr.stm) and Spanish (http://www.fao.org/infoods/presentations_es.stm).

Tool development,

- a simple database management tool in Excel: the Compilation Tool, which can be downloaded free of charge together with a user guide from http://www.fao.org/infoods/software_en.stm. The French and Spanish versions of the Compilation Tool are expected to be published in late 2011. It is planned to publish the Compilation Tool also as Access datafiles.

Databases and tables

- Food Composition Database on Biodiversity (first edition in 2010, second edition in 2011) which hold analytical data collected from the literature and theses on food biodiversity. The 2010 version contains compositional data for over 2400 foods. It is can be downloaded from http://www.fao.org/infoods/biodiversity/index_en.stm .
- Composition of selected foods in West Africa (2010), co-published with WAHO and Bioersivity International (Stadlmayr et al., 2010). It is available free of charge from the INFOODS website <http://www.fao.org/infoods/Userdatabasetexttablescoverrevised.pdf>
- West African Food Composition Table (2011), co-published with WAHO and Bioersivity International. (Stadlmayr et al., 2011). It is available free of charge from the INFOODS website
- co-published the food composition tables of
 - ASEANFOODS food composition table in 2000
 - LATINFOODS food composition table in 2000. Available at <http://www.inta.cl/latinfoods/>
 - .The Pacific Islands Food Composition Table, second edition, published in 2004. Available from http://www.fao.org/infoods/tables_oceania_en.stm#pacif
 - Lesotho in 2006 (Leopolde et al., 2006)
 - Brazilian Food Compositing Table in 2008. Available at <http://www.fcf.usp.br/tabela/>
 - Armenian in 2010.Available at: <http://www.fao.org/infoods/ArmenianFoodCompositionTable2010.pdf>

Laboratory Quality Assurance

- Several proficiency testing (PT) were organized, especially in ASEANFOODS countries. More PTs are planned in SAARCFOODS countries
- Strengthening laboratory capacity in food composition (including accreditation) in the South Pacific in 2002-2004 through FAO

Biodiversity

- Development of two Nutritional Indicators for Biodiversity on food composition (FAO, 2008) and on food consumption (2010 in English), available at http://www.fao.org/infoods/biodiversity/index_en.stm. The French versions are available at http://www.fao.org/infoods/biodiversity/index_fr.stm and the Spanish ones at http://www.fao.org/infoods/biodiversity/index_es.stm.

International Food Data Conferences (IFDC)

INFOODS co-organized 9 IFDCs taking place every second year in a different place and every 4 years as a satellite meeting to the ICN (International Conference on Nutrition):

- First International Food Data Base Conference: Quality and Accessibility of Food-Related Data. Sydney, Australia, 22–24 September 1993
- Second International Food Data Base Conference: Food Composition Research - The Broader Context. Lahti, Finland, 28 August - 30 August 1995
- 3rd International Food Data Conference. Rome, Italy, 5 - 7 July 1999. Back to Basics
- 4th International Food Data Conference. Bratislava, Slovakia, 24 - 26 August 2001
- 5th International Food Data Conference. Washington DC, USA, 30 June - 2 July 2003
- 6th International Food Data Conference: Food Composition Data and the Nutrition Dilemma. Pretoria, South Africa, 14-16 September 2005
- 7th International Food Data Conference: Food Composition and Biodiversity. São Paulo, Brazil, 22-24 October 2007
- 8th International Food Data Conference: Quality food composition data - key for health and trade. Bangkok, Thailand, 1-3 October 2009
- 8th International Food Data Conference: Food Composition and Sustainable Diets. Norwich, UK, 14-17 September

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