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Final report on specialist workshops, training courses and individual exchanges undertaken with recommendation for future bespoke training

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D4.3: Final report on specialist workshops, training courses and individual exchanges undertaken with recommendation for future bespoke training

March 2013;

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A. Specialist workshops & training courses

Continuing professional development (CPD) is common to most professions including food science. Often in parallel with undergraduate and graduate education, it takes the form of structured learning to ensure competence or enhance practice.

Examples applicable to both target groups (education and CPD) are specialist workshops and/or training course, which consist of activities that help create or maintain, develop and increase knowledge, problem-solving, technical skills or professional performance standards, and include elements of self-directed learning (e.g. directed reading) as well as formal 'classroom' instruction.

Participation in CDP demonstrates a commitment to competent performance in a framework that is fair, relevant, inclusive, transferable and formative. NEXUS offered specialist workshops (Pitfalls and challenges in reporting food composition data, and FoodComp Course in 2011 and 2012) supported by Wageningen University (WU).

1. Pitfalls and challenges in reporting food composition data, Norwich (UK) 12-13th September 2011

This workshop was hosted at the Norwich BioScience Institutes (NBI) Conference Centre (Norwich, UK) immediately prior to the EuroFIR NEXUS meeting and 9th IFDC Conference.

Specifically for food composition data compilers, it was organised and presented by Jayne Ireland and Anders Møller (DFI, DK), Susanne Westenbrink (RIVM, NL) and Marine Oseredczuk (ANSES, FR).

EuroFIR NoE successfully created a distributed food composition databank system (EuroFIR eSearch) with data from 26 EuroFIR compilers and other international organisations. The system is based on EuroFIR's common specifications for the documentation of data and layout of files for data interchange. Some of the important tasks in connection with this were data conversion and checking, which showed there are common issues for all compilers.

This workshop followed the critical control points (CCPs) for the EuroFIR Compilation Flow Chart with emphasis on those that have a direct influence on reporting of food composition data. During the discussions, compilers expressed concerns about being able to deliver data according to EuroFIR specifications. These were followed up subsequently (Annex I).

2a. 10th International Postgraduate Course: Production and use of food composition data in Nutrition (FoodComp Course 2011), Wageningen (NL), 16-26th October 2011

The 2011 course was hosted by WU with 20 participants (Annex II) of whom two (Estonia and Sweden) of whom received a EuroFIR NEXUS bursary.

The programme comprised the following: Introduction and overview of food composition; Food and nutrition priorities and sampling issues; Analytical methods/data quality; LanguaL and building a database; Recipe calculations, Database management issues; Applications.

At the end of this course, 17 participants took the opportunity to evaluate the course. Most participants rated the course from good to very good. As in 2008, the participants rated the topic 'Food & nutrient priorities / sampling issues' as most relevant (4.5) and 'the excursions' as less relevant (2.7). The overall difficulty was assessed as below average (2.7). The topic 'Recipe calculation/database management issues' was found to be the most difficult (3.4). Presentation of posters was seen as the least difficult aspect in the course programme (1.9).

The time allocated for the different topics was regarded as sufficient (3). Because participants have different background, a diverse range of comments were received with respect to future use of acquired knowledge, e.g. "*improve management activities on food composition data*", "*working more precisely and effectively*", and "*give more attention to standardisation in the construction of the food composition database*". (for details available in Annex II)

2b. 11th International Postgraduate Course: Production and use of food composition data in nutrition (FoodComp Course), Istanbul (Turkey), 7-17th of October 2012

Again organised by WU, the FoodComp Course 2012 was hosted by TUBITAK/ Marmara Research Center (MAM) in Turkey. In total 15 participants enrolled; two (Serbia) of whom received a EuroFIR NEXUS bursary.

The programme was comprised of the following: Introduction and overview of food composition; Food and nutrition priorities and sampling issues; Recipe calculations; Analytical methods; e-learning /data quality; Database management; and Food description: principles of compiling, using LanguaL and Application.

Participants were given the opportunity to evaluate the course. Most participants rated the course good to very good. The participants rated the topic 'Recipe calculation/database management issues' as most relevant (4.5). The topic 'Analytical methods and data quality was regarded as most difficult (3.4-3.2). The time allocated for the different topics was regarded as sufficient. As most participants are compilers, they expressed their intentions to bring the course issues into practice as: "*improve food composition database*" and "*advocate FCTs in developing countries*". Further information can be found in Annex III.

Participants of both FoodComp Courses received a certificate at the end of the course (Annex III).

3. e-Learning module

e-Learning refers to the use of information and communication technologies (ICT) in education and CPD. It includes text, audio, images, animation, and streaming video to enhance the learning experience. Modules may stand-alone after download or require continuous Internet access. E-Learning can occur in or out of the formal classroom, can be self-paced, asynchronous learning or instructor-led, synchronous learning. It is suited to distance learning and flexible learning, but it can also be used in conjunction with face-to-face teaching (blended learning).

EuroFIR NoE and EuroFIR NEXUS supported the creating and launch of two e-learning modules: Nutrient analysis for non-chemists (Module 1) and Vitamins (Module 2).

- I. Nutrient analysis for non-chemists
- II. Vitamins

The Nutrient analysis for non-chemists module, developed in 2008-2010, is described in report of the earlier project EuroFIR and in D4.2. The additional module (Vitamins) was finalised in 2012 and is described in D4.5.

These modules are part of the EuroFIR AISBL Full and Ordinary Membership packages and from 2013 will be available on request for 6 or 12 months for 25 and 50 EUR, respectively, for non-members and students.

Inventory of introducing the e-learning module in university curriculum

Module 1 has been included as part of the Human Nutrition BSc curriculum at Wageningen University (NL) since 2010. This offers an example to other universities and higher education linked with EuroFIR NEXUS how they might include modules 1 and 2 to enhance their under-graduate curricula or offer post-graduate and staff topics for CPD. See D4.5 for the curriculum example.

Future exploitation of these modules is described in D4.5

Dissemination of the e-learning modules

An article on the macronutrients e-learning module was accepted for publication in the Journal of Food Composition Analysis (Busstra et al. [2012] Nutrient analysis explained for non-chemists by using interactive e-learning material J Food Comp Anal 25: 88–95) (EuroFIR diss. Nr. 63).

Over time, many EuroFIR NoE and NEXUS of training course participants have used the first e-learning module. More specifically, as part of the BSc curriculum Human Nutrition Wageningen University (HNE11306 & HNE22806), **255** students have developed their understanding of macronutrient and mineral analysis using this module (2011/2012 120 students, 2012/2013 135 students). In addition, 99 participants in the FoodComp Courses 2008-2012 have similarly used the module:

2008 – Bratislava (SK): 25 participants
2009 – Wageningen (NL): 21 participants
2010 – Pretoria (ZA): 18 participants
2011 – Wageningen (NL): 20 participants

2012 – Istanbul (TR): 15 participants

In addition in 2012, as part of the EU-funded Smiling project (EU Project nr 289616), Wageningen University (NL) organised a Food comp training workshop hosted by the National Institute of Nutrition in Hanoi (VN). Ten participants from Laos, Cambodia, Thailand, Indonesia and Vietnam used the E-learning module during the training workshop.

B. Review and recommendations for future training offerings

Budgetary constraints meant individual exchanges were not possible, and the DOW was amended to recognise this. A survey was developed and carried out to determine training needs and offerings amongst NEXUS Beneficiaries and EUROFIR AISBL members between October and December 2012. To that end, a questionnaire was developed and circulated amongst EuroFIR NEXUS Beneficiaries and EuroFIR AISBL members on 9th October 2012 by email as WORD file (Annex IV), and two weeks later as an online survey, asking about training needs and offerings.

The questionnaire was also used as a basis to explore the needs of delegates attending the EuroFIR NEXUS Balkan Workshop (19-20th January 2013), which is reported elsewhere (D4.6 Final report on Balkan Food Platform and recommendations for future integration of WBC/ EECA countries).

By January 2013, from a total of 26 Beneficiaries, replies had been received from IFR, WU, ETHZ, NFA, IMR, SLU, VUP, ANSES, INSA, THL, INRAN, IARC, Topshare, RIKILT, UZEI, RIVM, IDUFIC, HERBALIFE, IEO and FCN, but not UCC, BNF, DFI or DTU (NEXUS Beneficiaries) or the majority of EuroFIR AISBL members (individuals and organisations). The outcomes of this survey are summarised below.

Production and use of food composition data - training in all seven areas reviewed is available for EuroFIR AISBL members (free or at reduced costs), and all but recipe calculation on a free or cost-paying basis to non-members. Five NEXUS Beneficiaries indicated training needs in five areas (Table 1).

Table 1: Production and use of food composition data

Q2	Offer	EuroFIR	Need
Food and nutrient priorities	WU, IMR	IFR	IEO
Choice of analytical method	WU, RIKILT	INSA	ANSES, RIVM
Sampling of foods	WU	IFR	
Data Quality/evaluation	WU, RIKILT	IFR, INSA	NFA, IARC, RIVM, IEO
Food nomenclature systems	IMR	IFR; INSA, IARC, IDUFIC	
Recipe calculation		IFR; IMR; IARC	NFA, IEO
DB management systems	NFA, VUP, IARC; RIKILT	IMR, IDUFIC	UZEI, IEO

Offer: free or cost-paying offer to all

EuroFIR: free or reduced cost-paying to EuroFIR AISBL members

Analytical methods, equipment and facilities for **proximates** – available for EuroFIR AISBL members as well as non-members, except carbohydrates. However, one EuroFIR AISBL member and one NEXUS Beneficiary need training in carbohydrate analysis (Table 2).

Table 2: Analytical methods, equipment and facilities

Q3	Offer	EuroFIR	Need
Carbohydrates			INSA
Protein	WU, SLU, RIKILT	INSA	
Fat/fatty acids	NFA, SLU, RIKILT	WU, INSA	
Dietary fibre	SLU	INSA	WU
Alcohol	RIKILT		WU
Ash	WU, RIKILT	INSA	

Offer: free or cost-paying offer to all

EuroFIR: free or reduced cost-paying to EuroFIR AISBL members

Analytical methods, equipment and facilities for **mineral analysis** (Ca, P, Mg, Na, K) – only INSA and RIKILT offer training for EuroFIR AISBL members and non-members, respectively. No partner indicated a need. Analytical methods, equipment and facilities for **trace elements** (CL, Cu, Fe, I, Se, Zn) are offered, again, by INSA (not iodine) but also RIKILT to EuroFIR AISBL members and non-members. No partner indicated a need for training.

Analytical methods, equipment and facilities for all **water- and fat-soluble vitamins** – available for EuroFIR AISBL members and non-members from six NEXUS Beneficiaries, and six vitamins (A, E, riboflavin, niacin, B6 and C) from INSA for EuroFIR AISBL members only. NFA has established methods for all the vitamins listed whilst partners offering some analytes include INSA, WU, RIKILT and SLU. Carotenoid analysis is offered only by WU and, avenanthramides (non-vitamin compound) by SLU (Table 3). One partner expressed a need for vitamins D and K, folate, folic acid and B12 analytical methods, equipment and facilities.

Table 3: Vitamin analysis and other analyses

Q3	Offer	EuroFIR	Need
A	WU; NFA, SLU, RIKILT	INSA	
D	NFA, RIKILT		INSA
E	WU, NFA, SLU	INSA	
K	NFA		INSA
B1	NFA		
B2	NFA	INSA	
Niacin	NFA	INSA	
B6	NFA, RIKILT	INSA	
Folate	NFA, SLU		INSA
Folic acid	NFA, SLU		INSA
B12	NFA		INSA
C	WU, RIKILT	INSA	
Carotenoids	WU		
Avenanthramides	SLU		

Offer: free or cost-paying offer to all

EuroFIR: free or reduced cost-paying to EuroFIR members

Very few **elearning** opportunities are offered. Besides the EuroFIR Modules 1 and 2, WU offers three modules on 'dietary exposure assessment', '(nutrition) requirements

and recommendations' (1 ETCS) and '(human) study designs' (5 ECTS), on a cost basis.

IARC offers the EPIC-soft software, also on a cost basis, and IEO a module on 'nutritional epidemiology' for free. Costs were not specified. Topshare International BV offers support for the development of elearning tools.

No webinars were offered.

Several other types of training were listed (Table 4). Significantly, 11 partners offered to host trainees while four explicitly stated they were unable to host trainees (FCN, ANSES, IDUFIC, HERBALIFE), largely because of the nature of their business (micro-SMEs or research-based, i.e. not practical learning).

No partner expressed the need for other (types) training needs.

Table 4: Other types of training and availability of placements

Q4/Q5	Institution
Documentation of food composition data	VUP
Practical analytical training	INSA, RIKILT
Cancer epidemiology	IARC (cost)
Cancer registration	IARC (cost)
Fellowships (awards)	IARC
Psychological or behavioural elements of consumer choice (free)	FCN
Willing to be host for visiting workers, trainees, students	WU, ETHZ, NFA, IMR, SLU, INSA, IARC, Topshare, RIKILT, RIVM, IEO

Summary a

A response from only nine (/26) NEXUS Beneficiaries, and few of the EuroFIR AISBL members (6) is disappointing. However, it may reflect the competencies of the NEXUS Beneficiaries and EuroFIR AISBL members, specifically provision of food composition information, which needs less support at the basic level.

Training and access to methods, equipment and facilities for production and use of food composition data, and the analysis of all macro-/ proximates and micronutrients regularly required in food composition databases, is comprehensive with needs far exceeded by opportunities for training. The only exception is carbohydrates, which is expressed as a need by INSA – one of the most experienced national compiler organisations – but not offered by any of the other organisations.

Recipe calculation is only offered for EuroFIR AISBL members, not non-members.

Needs expressed by NEXUS Beneficiaries, EuroFIR AISBL members and non-member food composition organisations and individuals (e.g. dieticians) may be addressed with the launch of the new EuroFIR FoodBasket tool.

Six e-learning modules are offered, under different conditions, generally, free for EuroFIR AISBL members and on a cost basis for non-members although costs were not specified. Few other training opportunities are available although 11 NEXUS Beneficiaries are willing host trainees, suggesting there is the potential for exchange/ visits for capacity development amongst EuroFIR AISBL members or the wider Food Composition Community, subject to available funding.

The poor response to this questionnaire could be an indication the NEXUS Beneficiaries and EuroFIR AISBL members feel the current programme of training is

not important, relevant or applicable to them. With that in mind a questionnaire seeking to determine satisfaction with products and services , which included questions about general training needs, was circulated amongst EuroFIR AISBL members. The outcome of this survey will be used to developing the EuroFIR AISBL Business Plan 2013-2014.

Recommendations for existing and future training offerings

- Develop EuroFIR AISBL Training Portfolio describing training available and costs, specifically in the areas of:
 - ⇒ FoodComp Course – full (10 days) and short (1-2 days) versions in cooperation with WU
 - ⇒ Additional e-learning in cooperation with WU (see D4.5)
 - ⇒ Project proposals and management in collaboration with RTDS (AT)

- Establish NEXUS Beneficiaries' terms and conditions for delivering training/ hosting after March 2013
 - ⇒ Obtain further information regarding methods and costs, certification, local support

- Advertise training opportunities widely to increase income and (potentially) membership, respectively
 - ⇒ Create training rolling training programme meeting EuroFIR AISBL members' need

- Match up training needs and offers, small (visits), medium (workshops) and large (satellite events at larger meetings, e.g. EU-funded consortia meetings, science conferences)

ANNEX I: Report on the EuroFIR Compiler Questionnaire 2011

EuroFIR Compiler Questionnaire 2011:

Pitfalls and Challenges in Reporting Food Composition Data

Jayne Ireland (DFI), Susanne Westenbrink (RIVM), Marine Oseredczuk (ANSES), Anders Møller (DFI)

Introduction

EuroFIR NoE successfully created a distributed food composition databank system (EuroFIR eSearch) with data from 26 EuroFIR compilers and other international organisations. The system is based on EuroFIR's common specifications for the documentation of data and layout of files for data interchange. Some of the important tasks in connection with this creation were data conversion and data checking, which showed that there are some common issues all compilers need to be careful with. For this reason, a half-day workshop¹ for FCDB compilers was held at the 1st annual meeting of the EuroFIR Nexus project in Norwich, September 2011.

The compiler workshop followed the critical control points (CCPs) of the EuroFIR Compilation Flow Chart², emphasizing those that could have a direct influence on the reporting of food composition data. During the discussions, compilers expressed their concerns about being able to deliver data according to EuroFIR specifications. In order to further describe these issues, it was decided to make a survey among the EuroFIR compilers by circulating a questionnaire to determine which specific challenges and difficulties they still encounter, and whether it may still be necessary to assist some compilers on a one-to-one basis.

The present report will first present the list of compilers who responded to the questionnaire and the results of the survey. We will then examine the list of food composition databases that did not respond to the questionnaire and the reasons evoked. The report will end with some general conclusions and recommendations.

Results of questionnaire

A majority of the EuroFIR food composition database compilers answered the 2011 compiler questionnaire. **Table 1** lists these 19 databases: country, name of the FCDB, mailing address, contact persons & emails, plus the number of foods (& LanguaL indexing) in eSearch according to the EuroFIR NoE Publishable Executive Summary³.

The compiler questionnaire was divided into 3 sections:

- format in which the next data set will be delivered to EuroFIR eSearch;
- level of documentation in the next data sets for eSearch;
- validation of data before sending it to eSearch.

¹ J Ireland, S Westenbrink M Oseredczuk, A Møller (2011) Workshop 1: Pitfalls and Challenges in Reporting Food Composition Data. EuroFIR Nexus report.

² S. Westenbrink & M. Oseredczuk (2007) *The compilation process: Generic flow chart, hazards, critical control points and identification of relevant standard operating procedures*. EuroFIR Work Package 1.3, Task Group 2 (D 1.3.9).

³ FP6-CT-2005-513944 European Food Information Resource Network of Excellence Publishable Executive Summary January 2009 to June 2010. http://www.eurofir.eu/sites/default/files/Publishable%20Executive%20Summary_final_100810.pdf

TABLE 1: QUESTIONNAIRE RESPONDENTS

Country	FCDB	Mailing address	Compilers	Foods (Langu aL)
Belgium	NIMS FCDB	Victor Hortaplein 40 bus 10, 1060 Brussels	Carine Seeuws (carine.seeuws@health.fgov.be)	1204 (913)
Bulgaria	Bulgarian food composition database	Bulgaria, Sofia 1431, National Centre of Public Health and Analysis /NCPHA/	Desislava Krasteva Gyurova (d.guirova@ncphp.government.bg), DR. Ivaylo Vaklinov – Director of National Centre of Public Health and Analysis /NCPHA/	827 (827)
Czech Republic	Czech Food Composition Database	Agricultural and Food Library - Institute of Agricultural Economics and Information, Manesova 1453/75, Prague 2, 120 56 Czech Republic	Marie Machackova (machackova.marie@uzei.cz)	77 (77)
Denmark	Danish Food Composition Databank v. 7.0	Division of Nutrition, Technical University of Denmark, National Food Institute, Mørkhøj Bygade 19, 2860 Søborg	Tue Christensen (tuchr@food.dtu.dk), Erling Saxholt (esax@food.dtu.dk)	1049 (1049)
France	French food composition table Ciqual 2008	ANSES/DER/C IQUAL, 27-31 avenue du general Leclerc, 94700 Maisons-Alfort	Marine Oseredczuk (marine.oseredczuk@anses.fr); Laure du Chaffaut Koulian (laure.duchaffaut@anses.fr)	1294 (1294)
Germany	German Nutrient Database (Bundeslebensmittelschlüssel BLS)	Haid-und-Neu-Str. 9, 76131 Karlsruhe	Bernd Hartmann (bernd.hartmann@mri.bund.de)	205 (1034)
Greece	GR HHF FCDB	Tetrapoleos 10-12, 115 27	Antonia Trichopoulou (atrichopoulou@hhf-	214 (214)

Country	FCDB	Mailing address	Compilers	Foods (Langu aL)
		Athens	greece.gr), Effie Vasilopoulou (evasilopoulou@hhf-greece.gr)	
Iceland	ISGEM (Icelandic FCDB)	Matis - Icelandic Food and Biotec R&D, Vinlandsleið 12, IS-113 Reykjavik	Olafur Reykdal (olafur.reykdal@matis.is)	1151 (946)
Ireland		School of Food and Nutritional Sciences, University College Cork, Western Road, Cork	Mairead Kiely (m.kiely@ucc.ie)	938 (938)
Italy	BDA2008	Division of Epidemiology and Biostatistics, IEO Istituto Europeo di Oncologia - Via Ramusio,1 - 20141 Milan	Patrizia Gnagnarella (patrizia.gnagnarella@ieo.it), Simonetta Salvini (simonetta.salvini58@gmail.com), Maria Parpinel (maria.parpinel@uniud.it)	935 (935)
Italy	Italian Food Composition Table	?	Marletta Luisa (marletta@inran.it), Camilli Emanuela (camilli@inran.it), Daddezio Laura (daddezio@inran.it), Turrini Aida (turrini@inran.it)	790 (790)
Netherlands	Dutch Food Composition (NEVO) database	National Institute for Public Health and the Environment, Centre for Nutrition and Health, P.O. Box 1, 3720 BA Bilthoven, e-mail:nevo@rivm.nl	Susanne Westenbrink (project leader/compiler) (susanne.westenbrink@rivm.nl), Martine Jansen (compiler) (martine.jansen@rivm.nl), Ido Toxopeus (IT specialist) (ido.toxopeus@rivm.nl)	1672 (1670)

Country	FCDB	Mailing address	Compilers	Foods (Langu aL)
Poland	Polish FCDB	National Food and Nutrition Institute, Warsaw, Powsinska 61/63	Mrs Beata Przygoda (bprzygoda@izz.waw.pl)	932 (932)
Portugal	PT INSA 2008	INSA, Av. Padre Cruz, 1649-016 Lisboa	Luísa Oliveira (luisa.oliveira@insa.min-saude.pt)	962 (962)
Serbia	SrbFIR - Serbian food composition data base	<u>IMR, Tadusa Koscuskog 1, 11000 Belgrade, Serbia</u>	Mirjana Gurinovic (mirjana.gurinovic@gmail.com), Maria Glibetic (mglibetic@gmail.com)	1143 (1142)
Slovakia	Slovak Food Composition Data Bank	pbd@vup.sk	Anna Giertlova (giertlova@vup.sk)	1400 (1400)
Slovenia	The Slovenian Food Composition Database	Jožef Stefan Institute, Jamova c. 39, SI-1000 Ljubljana	Barbara Koroušić Seljak (barbara.korousic@ijs.si), Mojca Korošec (mojca.korosec@bf.uni-lj.si)	
Spain	Base Española de Datos de Composición de Alimentos	igna18@correo.ugr.es	Emilio Martínez de Victoria (emiliom@ugr.es), Ignacio Martínez de Victoria Carazo (igna18@correo.ugr.es)	459 (458)
Sweden	The National Food Administration's food database	Livsmedelsverket, Box 622, 751 26 Uppsala	Veronica Öhrvik (veoh@slv.se), Marianne Arnemo (maar@slv.se), Anna Karin Lindroos (akli@slv.se)	1502 (1476)
Turkey	TUBITAK Food Composition Data Set-Value Documentation 2010	?	Gül Löker (Gul.Biringen@mam.gov.tr)	344 (337)
United Kingdom	Composition of foods integrated dataset	Institute of Food Research, Norwich Research Park, Colney, Norwich, NR4	Mark Roe (mark.roe@ifr.ac.uk), Hannah Pinchen (hannah.pinchen@ifr.ac.uk), Paul Finglas (paul.finglas@ifr.ac.uk)	3423 (1702)

Country	FCDB	Mailing address	Compilers	Foods (Langu aL)
		7UA		

1. Format

Of the 21 respondents, 12 plan to update their food composition data on eSearch in 2012. 8 plan to do so in 2013 or 2014, and one does not know. Ten FCDBs answer that they will connect their databases directly to eSearch from their own websites and that they are able to deliver data in XML format according to EuroFIR Food Data Transport Package specifications. Thirteen FCDBs answer that their FCDBs will connect to EuroFIR eSearch via a hosted database. Some of the FCDB compilers are not sure about how their next data set will be delivered to eSearch and have answered “yes” to both questions. This is summarized in **Table 2**.

TABLE 2: FCDBS AND FORMAT OF NEXT UPDATE FOR ESEARCH

Service 2010	Service next	Plan update 2012	Plan update 2013-2014	Challenge for EuroFIR
Own	Own	DK-DTU, ES-UGR, GR-HHF, ISGEM, RS-IMR, SK-VUP	SE-SLV (date unknown)	No particular problem
Hosted	Own	SI-JSI (not previously connected to eSearch)	PL-IZZ, PT-INSA (2014)	Assistance to export into XML transport package
Hosted	Hosted	CZ-UZEI, FR-Ciqua, IT-IEO, IT-INRAN, NL-NEVO, UK-IFR	BE-NIMS, BG-NCPHA, DE-BLS, FR-Ciqua, IE-UCC, TR-TUBITAK	Creating hosted databases in order to link to eSearch

Of the 13 compilers who plan to deliver their next data set to eSearch via a EuroFIR hosted database, 11 are able to deliver data to EuroFIR Nexus WP2 in relational database format according to EuroFIR Standard. The others say they will deliver data in a different relational database format or in Excel format. One compiler has answered yes to all three questions. The compilers BE-NIMS, BG-NCPHA and DE-BLS will need individual help to extract their data to EuroFIR Standard (**Table 3**).

TABLE 3: FORMAT DATA FOR ESEARCH (HOSTED DATABASES)

Relational database format, EuroFIR Standard	Relational database format, other	Excel spreadsheet
BG-NCPHA, CZ-UZEI, FR-Ciqua, IE-UCC, IT-IEO, IT-INRAN, NL-NEVO, TR-TUBITAK, UK-IFR	BE-NIMS, BG-NCPHA,	DE-BLS, BG-NCPHA,

The principal challenges cited by the compilers are lack of IT-skills and lack of funds for technical support. Data delivery will also depend on capabilities of FoodCase and its availability. As almost half of the compilers are not able to deliver their food composition data in the required format for the EuroFIR eSearch, this requires extra

efforts from EuroFIR AISBL/EuroFIR Nexus in order to uphold the EuroFIR eSearch platform.

One compiler asked to be informed ahead of time of EuroFIR deadlines for supplying data. However, data updates are up to the compiler organisations. Compilers should simply inform EuroFIR AISBL when a new version is available, the same as they inform their users.

2. Data Documentation

In the questionnaire, it was examined how the next datasets provided to EuroFIR eSearch will be documented, focussing on foods, components, values and references.

Foods

All but one of the FCDBs (DE-BLS) can provide food names in both own language(s) and in English. DE-BLS needs to work more on the English translations. Three FCDBs (DE-BLS, NL-NEVO, UK-IFR) will have difficulties providing LanguaL indexing for all of their foods, due to the large number of foods in their databases. Some of the compilers say that the list of LanguaL codes will be included in their FOOD table, instead of in a separate table. This may add to the challenges in connection with the data conversion/extraction/reformatting to hosted databases.

Some compilers would like to include additional fields in the FOOD entity to document foods in their data set on eSearch, e.g. general remarks, sampling information, amount and nature of edible portion & waste, retailer/producer, scientific name, link to recipe & ingredients, cuisine type, matrix unit (per 100g or per 100 ml). Several compilers say they will include all food fields from FoodCASE software. One compiler would like help to include infant food in their database. Some of these issues, e.g. remarks, edible portion and scientific names are already part of the data documentation and interchange schemes, but currently not shown in the EuroFIR eSearch. An update of EuroFIR eSearch could solve this. However, it is not advisable to include matrix unit at the food level in EuroFIR eSearch, as such properties are closely linked to the value level.

Components

One of the compilers (PL-IZZ) does not plan to provide a list of components with EuroFIR component IDs and names in original name and English. This seems to be in contradiction to their plan to deliver data set directly to eSearch using the EuroFIR XML transport package (see above).

Some compilers reported that more Component IDs are needed in the *EuroFIR Component Thesaurus*:

C20:>1; C22:>1; C8:0+C10:0; C12 to C16 saturated; >C18 saturated; fat total unsaturated; fatty acids total unsaturated; Carotenoids excluding B-carotene; Beta-glucans; Hydroxylysine; Chitin; Pimelic acid; Wholegrain

Values

Value Type of Selected Value

Only 13 of the 20 compilers plan to provide EuroFIR *Value Types* (e.g. "MN", "TR", "N") to document their values. Five compilers report that the Selected Value field in

their data set may contain characters (e.g. "N", "tr", "-", "<"), although this is not currently allowed in the EuroFIR Standard or in the draft CEN Standard

Use Value Type thesaurus	Characters in Selected Value
BG-NCPHA, GR-HHF, ES-UGR, FR-Ciqua, IE-UCC, IT-IEO, NL-NEVO, PL-IZZ, PT-INSA, RS-IMR, SK-VUP, TR-TUBITAK, UK-IFR	BE-NIMS, BG-NCPHA, ISGEM, IT-INRAN, TR-TUBITAK

Significant digits

60% of compilers declare they will report data with a maximum of 3 significant digits. A few say that values published with more than 3 significant digits are uncommon but can be found in concentrated foods. This means that EuroFIR AISBL/EuroFIR Nexus may have to check the number of significant digits and round/truncate values before publication on eSearch (at least for the hosted databases) if international recommendations⁴ on the number of significant digits (max. 3 significant digits) should be followed in EuroFIR eSearch.

Statistics

About half of the databases updated in EuroFIR eSearch will include information about the number of data points/samples, range (maximum & minimum values) and standard deviation or standard error (not currently shown in EuroFIR eSearch).

Units

Three databases (BE-NIMS, IT-INRAN, DE-BLS) report that their VALUE table provided for eSearch will not include the Matrix Unit code. This does not comply with the EuroFIR Standard and is not acceptable. Hopefully this is due to a misunderstanding, and these compilers meant that all of their values will be given per 100 g edible portion (and not some values per 100 ml) – but it needs to be further investigated.

Methods

Two databases (BE-NIMS & DE-BLS) report that they will not be able to provide method information (Acquisition Type, Method Type, Method Indicator) for their data in EuroFIR eSearch. This is very unfortunate as this is mandatory information to be delivered to EuroFIR eSearch.

Twelve of the 20 databases report they will provide NCF and FCF values for all foods. This is in progression from the first data delivery. One database (IT-INRAN) reports it will also provide Method Parameters for other components (starch, energy, tocopherols, retinols) in the VALUE table.

Six of the databases (DE-BLS, ES-UGR, GR-HHF, IT-INRAN, PT-INSA, UK-IFR) can provide additional method information in a Method Specification table. Although it is not mandatory, the EuroFIR Food Data Transport Package supports this information. However, such information is not currently shown in EuroFIR eSearch.

⁴ Greenfield H & Southgate DAT (2003) Food composition data. Production, management and use, Food and Agriculture Organization of the United Nations, Rome, p.165.

Some compilers report that they are missing some *Method Indicators* in the EuroFIR thesaurus to document their data:

- VITA = RETINOL + 1/12 CARTB [MI0324: VITA = RETOL + (CARTB/12) + (other pro-vitamin A carotenoids / 24), but we do not monitor other provitamins]
- Energy (kJ) = 17 kJ/g x g PROT + 17 kJ/g x (g CHO - g POLY) + 37 kJ/g x g FAT + 29 kJ/g x g ALC + 13 kJ/g x g OA + 10 kJ/g x g POLY [using protein calculated from Jones NCF, not 6.25 as in the EC Labelling Directive]
- Energy (kcal) = 4 kcal/g x g PROT + 4 kcal/g x (g CHO - g POLY) + 9 kcal/g x g FAT + 7 kcal/g x g ALC + 3 kcal/g x g OA + 2.4 kcal/g x g POLY [using protein calculated from Jones NCF, not 6.25 as in the EC Labelling Directive]
- Energy (kcal and kJ) according to EU labelling directive including energy from dietary fibre, organic acids and polyols, which is the actual labelling directive
- CHO= CHOT-FIBT (CHOT =MI0131)
- imputation of a value from other food
- NT recalculated from PROT value with defined NCF
- FACN6= sum of FACN6 individual fatty acids
- TFA = sum of individual TFA
- total carbohydrates: Vd Kamer = pancreatin method + Luff Schoorl method used
- There was also a question about which method documentation should be favoured for fatty acids: analytical method (e.g. GLC /MI1205 or calculated from FA profile /MI0201).

Quality evaluation

Fifteen of the databases will indicate the date the value was evaluated (or created or updated). However, extremely few databases will include a data quality index. FR-Ciqua will include a Quality index for all foods; PT-INSA will include QI based on EuroFIR system and ISGEM will do this for a limited number of foods. DE-BLS is considering whether or not to include Quality Index. IE-UCC is waiting for a EuroFIR standard for evaluating data from manufacturers, even though this EuroFIR deliverable⁵ was published in summer 2009.

A major issue with data quality assessment within EuroFIR is that there are currently two systems for data quality evaluation, but these are dedicated to the assessment of original or raw data. A data quality assessment system for aggregated data (those to be published on eSearch) still has to be developed within EuroFIR NEXUS. The fact that at least one compiler did not know about the quality assessment systems already created may underline the need for communication, advocacy and training in this field.

References

All FCDB compilers can provide a list of references. However, 3 compilers (BE-NIMS, PL-IZZ, SK-VUP) report that they do not document their references with EuroFIR *Acquisition Types & Reference Types*. This seems strange, as it is rather simple to identify the *Acquisition Type* (e.g. Food composition table, Food label) &

⁵ Colombani et al. (2009) Final Report on Guidelines for Quality Index Attribution to Complementary Data for EuroFIR Data Interchange. EuroFIR Technical Report D1.3.26 (<http://www.eurofir.net/sites/default/files/Deliverables/D1.3.26.pdf>)

Reference Type (e.g. Book, Internet site) of one's own references; it is more difficult for an outsider who does not speak the language.

About 40 % of the compilers say that they will include *CiteXplore* codes when these are available, to document references in their databases.

Three compilers (BE-NIMS, BG-NCPHA, PL-IZZ) cannot provide reference citations as they should be published on eSearch. The Belgian database explains that this is for reasons of confidentiality. A simple solution for this could be to attach a generic citation "Industry data" for all of their confidential references, without revealing the exact source to the public. This was the solution adopted by the French FCDB. PL-IZZ cannot publish references for their next update on eSearch, as references are not currently linked to values, but they should start documenting their references by applying EuroFIR documentation. BG-NCPHA may need additional help to prepare their data for eSearch.

Thirteen of the FCDBs (68%) will link values to References in a separate REFERENCE_LINK table (with possibility of several references), 8 say that a Reference code will be furnished in the VALUE entity/table, and one answered yes to both questions. Three FCDB compilers (PL-IZZ, SE-SLV & ES-UGR) report they can provide a list of references but do not say they will link these to values - which is not very useful for data documentation.

Another serious challenge to EuroFIR AISBL/EuroFIR Nexus is that the Reference list also includes analytical/calculation methods in 5 of the databases (BE-NIMS, ES-UGR, GR-HHF, IT-INRAN, TR-TUBITAK). Nevertheless, all but one of these compilers (BE-NIMS) say that they can provide correspondence tables in order to separate reference and method information and to convert this "source" information to documentation according to the EuroFIR Standard (e.g. Acquisition Type, Method Type, Method Indicator, Value Type, bibliographic reference). BE-NIMS lacks IT skills, and their DBMS does not allow EuroFIR documentation to be included directly in their database. The BE-NIMS compiler needs specific assistance to extract data from the database and specifically to separate references and methods when delivering data to eSearch.

3. Data validation before publication

Checkpoints related to foods to be published on EuroFIR eSearch

All compilers will check consistency between food name in own language (ORIGFDNM) and English Food Name (ENGFDNM), but only 88 % will check consistency with LanguaL *Product Type* using the EuroFIR classification (PRODTYPE). Compilers may already use another classification and do not understand the point in checking the EuroFIR classification in addition.

Checkpoints related to component and method

All compilers will check consistency between EuroFIR component identifier (ECOMPID) and the component code, ID, or abbreviation used to identify the component in the original dataset. 88% will check consistency with the name of the component in own language. The same amount of compilers will check consistency between EuroFIR component identifier and *Method Indicator* code and *Method Type* code.

It is urgent to provide compilers with a fully updated list of valid *EuroFIR Component Identifiers*.

It is also urgent to provide compilers with an updated list of valid *Method Indicators* for each EuroFIR Component Identifier, so that they can perform this consistency check themselves.

Checkpoints related to data sources

No FCDB has a definition for "obsolete data source", but 28% of the FCDBs check for obsolete data. Obsolete data can refer to data from a version of a dataset that was superseded by a more recent version; it can also refer to data that correspond to foods that have undergone a change in their process or ingredients, e.g. nature, quantity, etc. Data could also be considered as obsolete when the food is no more on the market.

89% of the compilers say that confidentiality and terms of use (quotation) of data sources are respected. An example of this is the French use of a generic reference citation "Industry data" to respect the manufacturers' wish to remain anonymous.

Checkpoints related to consistency of component values

75% of the compilers compare their component values with other component values (same component) from similar foods in their FCDB.

About 60% define conditions to be used to assign logical zeros and traces. It would be interesting to collect these conditions or rules in order to evaluate if they are similar between EuroFIR databases. If they are, they could probably be also implemented in other databases, thus contributing to the harmonisation of data management within the EuroFIR framework

60% of the compilers use specific algorithms to assess consistency of values for different components in the same food. A list of algorithms is given in **Annex 1**.

Scope of the validation process of the data to be published on EuroFIR eSearch

75% of the compilers document internally how the data validation process will be performed, which means that for 25% of compilers, every time they make an update of their data requiring data validation, they have to start from scratch, certainly struggling to remember what was done earlier and performing non-standardized validations between the different issues of their datasets. The advantage of writing a Standard Operating Procedure on data validation should certainly be re-emphasized for these compilers. EuroFIR has indeed already produced useful generic procedures in that field. 30% of the compilers are assisted in data validation by outside organisations (e.g. Department of Health, FCDB scientific committee, IT-data integrity checks).

For 44% of the compilers, data validation before the next data transmission to EuroFIR eSearch will pose specific problems/challenges. Some examples of these challenges are: heavy workload, need for training in data validation, need to include data documentation in own FCDB, development of FoodCase.

Non-respondents

Table 4 gives the list of FCDBs that did not respond to the questionnaire. For memory, we have also included the status of these databases connected to EuroFIR eSearch, according to the EuroFIR NoE Publishable Executive Summary⁶.

TABLE 4: NON-RESPONDENTS

Country	FCDB	Service 2010	Foods (LanguaL) 2010
Austria	AT FCDB 2010	Hosted	13416 (501)
Finland	Fineli Release 10	Own	2095 (2095)
Latvia	LFCD 2009	Hosted	555 (554)
Lithuania	LT FCDB 2008	Hosted	218 (133)
Norway	NO MVT VDCB 2006	Hosted	1188 (1188)
Switzerland	Swiss FCDB v 3.01	Own	935 (912)

Four of these FCDBs (Austria, Latvia, Lithuania and Norway) are EuroFIR hosted databases. It is hoped that they can continue providing data to eSearch in the future, although they have provided no information about their specific problems or about the level of documentation or validation of the data they can deliver.

Two of these FCDBs (Finland and Switzerland) provided data directly to eSearch from their own website in XML format according to EuroFIR data transport specifications. We hope that the Finnish compiler can continue in the future. However, we have no information about the level of documentation of their data or their data validation before publication.

The Swiss FCDB could not answer the questionnaire because of uncertainty concerning the national FCDB. ETHZ reports that it will soon hand over its co-ownership of the Swiss FCDB to the Federal Office of Public Health (FOPH) in Bern.

This means that the FOPH will soon be the sole responsible for the Swiss FCDB, and ETHZ no longer national compiler organization. The FOPH will, however, not work on the FCDB itself, but has handed over the operational work to the Swiss Society for Nutrition, which has declared that they will not maintain the national dataset, but convert it to a user database for the Swiss National Nutrition Survey. The current online Swiss FCDB linked to eSearch will soon be put offline and removed from EuroFIR eSearch.

This is very bad news for the FCDB community, when public health authorities are not interested in creating and maintaining validated data sets. It is to be feared that some of the other non-respondents find themselves in similar situations.

⁶ FP6-CT-2005-513944 European Food Information Resource Network of Excellence Publishable Executive Summary January 2009 to June 2010. http://www.eurofir.eu/sites/default/files/Publishable%20Executive%20Summary_final_100810.pdf

Conclusions

Most compilers have responded giving useful information on the status of their data documentation and the difficulties faced. The answers pose quite some challenges to EuroFIR Nexus/EuroFIR AISBL.

The first conclusion is that almost half of the European food composition data compilers need support to deliver their data to EuroFIR eSearch.

The second conclusion is that EuroFIR AISBL/EuroFIR Nexus will have major tasks in transforming data and hosting data from about half of the European compilers in years to come.

The third conclusion is that EuroFIR AISBL/Nexus needs to provide much more concrete and detailed information, a “EuroFIR set of minimum requirements”, to all compilers for the compilers to follow. Moreover, the basic EuroFIR standards need to be made available to compilers in a more direct manner.

It appears from the answers to the questionnaire that some compilers do not comply with EuroFIR Recommendations – both in data documentation and in data interchange. Their organisations may have other priorities – or – the compilers do not understand. Other compilers seem to be willing to conform to EuroFIR recommendation and to perform important data validation protocols, based on internal documentation.

Fourth conclusion: despite all the work done on this subject, there does not seem to be much interest in Quality Indices for food composition data among the EuroFIR compilers. This is a subject that may have to be set aside for the moment, in order to concentrate on more urgent measures, i.e. data documentation in all data sets.

Proposed minimum requirements for publishing data on EuroFIR eSearch

We feel that EuroFIR AISBL/Nexus should specify a set of minimum requirements for publishing data on eSearch. Such a clear short list could help the group of compilers who are apparently not familiar with the existing EuroFIR deliverables or maybe discouraged by the gap between their current situation and the EuroFIR inspirations, to have a clearer vision of priorities.

Some of these requirements could be:

- LanguaL description of foods
- Use of *EuroFIR Component IDs*
- Providing EuroFIR *Unit* and *Matrix Unit* codes for all values
- Providing EuroFIR *Value Type*, *Acquisition Type*, *Method Type*, *Method Indicator* for all values
- Documenting *Method Parameter* for protein values when these have been calculated from nitrogen
- Rounding values to no more than 3 significant digits
- Providing a list of source references in citation format and documented with *Acquisition Type* and *Reference Type* codes
- Linking references to values

- Data provided to EuroFIR eSearch using EuroFIR Food Data Transport Package⁷ or in a data format compatible with the EuroFIR Standard⁸

Without documentation of source references and of methods, the data is less informative and of lower quality.

EuroFIR eSearch:

The EuroFIR eSearch presents the available European food composition information as a prototype anno 2010. As more information is gradually becoming available in the EuroFIR interchange files, this should be shown in EuroFIR eSearch. This means updating EuroFIR eSearch.

An update of EuroFIR eSearch should include:

- Remarks fields at FOOD and VALUE levels
- Names of original food groups (not just the original food group codes)
- Additional data fields at VALUE level: standard error, dates of value creation, update and evaluation
- Additional information (sample description, method specification)

Challenges for EuroFIR AISBL/EuroFIR Nexus

For nearly half of the compilers, data validation before the next data transmission to EuroFIR eSearch will pose specific problems/challenges. Some examples of these challenges are: heavy workload, need for training in data validation, need to include data documentation in own FCDB, development/availability of FoodCase. This has a severe impact of the responsibilities of the EuroFIR AISBL/EuroFIR Nexus.

Half of the compilers still need hosting, which also means data checking and conversion, plus web services.

The more data is documented the more useful it is for others and for one's own FCDB. So continuing and improving the value documentation will lead to higher quality of data. Knowing the difficulties/challenges from this questionnaire will help to focus on what can be improved. If compilers do not understand the benefits of data documentation and harmonisation or how to perform the work, then communication should certainly be strengthened or made in a different way.

⁷ Møller et al. (2008) EuroFIR Web Services – Food Data Transport Package. Version 1.3. EuroFIR Technical Report D1.8.20 (<http://www.eurofir.net/sites/default/files/Deliverables/D1.8.20.pdf>)

⁸ Becker et al. (2008) Proposal for structure and detail of a EuroFIR Standard on food composition data - Technical Annex, Version 2008. EuroFIR Technical Report D1.8.19 (<http://www.eurofir.net/sites/default/files/Deliverables/D1.8.19.pdf>).

Annex: Data validation algorithms

The following information on data validation algorithms was provided by compilers from NL-NEVO, SK-VUP, GR-HHF, UK-IFR, DK-DTU and ISGEM.

Consistency checks that are performed automatically in the NL-NEVO DBMS

1. Sum of macronutrients = 100 g. (Deviations > 5 gram are shown)
2. Total protein = animal protein + vegetable protein. (Deviations > 5 % are shown)
3. Total fat = SAFAT + MUFAT + PUFAT + Trans fat. (Deviations > 5 % are shown).
4. Total carbohydrates = polysaccharides + mono- en disaccharides. (Deviations > 5 % are shown).
5. Total iron = heam iron + non heam iron (Deviations > 5 % are shown).
- 6a. RE = retinol + 0.17* β -carotene + 0.08* α -carotene + 0,08* β -crypthoxanthin (Each deviation is mentioned).
- 6b. RAE = retinol + 0.08* β -carotene + 0.04* α -carotene + 0,04* β -crypthoxanthin (Each deviation is mentioned).
7. Linolic acid > PUFA (Each deviation is mentioned).
8. Sum of total fatty acids = SFA + PUFA + MUFA + Trans FA (Deviations > 5 % are shown).
9. n-3>PUFA (Each deviation is mentioned).
10. n-6>PUFA (Each deviation is mentioned).
11. ALA > n-3 FA (Each deviation is mentioned).
12. EPA>n-3 FA (Each deviation is mentioned).
13. DHA>n-3 FA (Each deviation is mentioned).
14. Linolic acid>n-6 FA (Each deviation is mentioned).

Consistency checks that are performed in the Slovak FCDB (SK-VUP)

DRY MATTER: Sum of PROT, FAT, CHOT, ASH is compared with DRYMAT.
Permitted diffrence is 5%.

ESSENTIAL AMINO ACIDS = VAL + LEU + ILE + THR + LYS + MET + PHE + TRP

SEMIESSENTIAL AMINO ACIDS = ARG + HIS

UNESSENTIAL AMINO ACIDS = GLY + ALA + SER + ASP + GLU + CYS + TYR +
PRO + HYP + HYDROXYLYSINE

FATTY ACIDS SATURATED, TOTAL (FATSAT) = sum (F4:0 to F15+17)

FATTY ACIDS MONOUNSATURATED, TOTAL (FAMS) = sum (F12:1CIS ...
F22:1)

FATTY ACIDS POLYUNSATURATED, TOTAL (FAPU) = sum (F22:3CN3 ...
F18:2TN)

If missing LINOLENIC ACID (F18:3), use gama-LINOLENIC (F18:3N6) + alfa-
LINOLENIC ACID (F18:3N3)

FATTY ACIDS, TOTAL trans (FATRN) = sum (F14:1TN5 + F18:1TRS + F18:1TN9 +
F18:2TN)

DIETARY FIBRE, TOTAL (FIBT) = FIBC + HEMICELLULOSE + PECT + CHITIN

ALCOHOLIC SUGARS, TOTAL (POLY) = sum (SORTL ... ISOMALT)

ORGANIC ACIDS, TOTAL (OA) = sum (FORMIC ACID ... PIMELIC ACID)

Consistency checks that are performed in the GR-HHF FCDB

g/100g : SFA + cis-MUFA + cis-PUFA + trans FA = total FA

carbohydrate = sugar + starch

100 \pm 5 = carbohydrate + protein + lipids + fiber + ash + water

Consistency checks that are performed in the UK-IFR FCDB

Checking summations of fatty acids, proximates, carbohydrates and vitamin fractions (e.g. vitamin A components and retinol equivalents)

Consistency checks that are performed in the DK-DTU FCDB

Sum(Fatty acids) may not exceed fat content
SUM(amino acids) must reflect protein content

Consistency checks that are performed in the ISGEM FCDB

Checking sum proximates

In addition, **IT-IEO** has a standard list of data consistency checks, but only available in Italian.

ANNEX II: Food composition course Wageningen 2011

10th International Postgraduate Course on Production and Use of Food Composition
Data in Nutrition
Wageningen, The Netherlands, 16-26 October 2011
Program

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Approximate time schedule: each session includes a 5-10 min break and 5-10 minutes discussion

9.00-10.30 Session 1
10.30-11.00 Coffee, tea break
11.00-12.30 Session 2
12.30-14.00 Lunch
14.00-15.40 Session 3
15.30-16.00 Coffee, tea break
16.00-17.30 Session 4
18.00-19.30 Dinner
19.30-21.00 Session 5

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Sunday 16 October 2011

Introduction

14.30-15.00 Registration
15.00-15.30 Welcome and orientation (F Pepping, P Hulshof)
15.30-16.00 Introduction to the course (P Hulshof)
16.00-16.45 Introduction of course participants and evaluation of the needs (P Hulshof, J Holden, A Møller)
17.00-17.45 Welcome cocktail lounge
18.00-19.30 Dinner

Monday 17 October

Food Composition overview

Session 1 Introduction to food composition data & databases (J Holden)
Setting priorities and selection of foods and nutrients (part 1)
Session 2 Country presentations by participants, part 1 (P Hulshof, chair)
Session 3 Country presentations by participants, part 2 (J Ireland, chair)
Session 4 Food Composition data: EuroFIR, lessons learned (A Møller)

Tuesday 18 October

Food and nutrient priorities and sampling issues

Session 1 Setting priorities and selection of foods and nutrients-part 2 (J Holden)
Session 2 Sampling of foods for analysis (J Holden)
Statistical principles underlying sampling procedures (H van der Voet)
Session 3 Statistical principles underlying sampling procedures (H van der Voet)
Session 4 Design of sampling protocols (J Holden)

Wednesday 19 October

Analytical methods/data quality

Session 1 Choice of analytical methods for FCDB (P Hulshof)
Review of methods of analysis: energy, water, ash, alcohol (P Hulshof)
Session 2 Laboratory data quality (P Hollman)

- Session 3 Review of methods of analysis: E-learning: proximates (P Hulshof, C Busstra)
- Session 4 Review of methods of analysis: E-learning: proximates (P Hulshof, C Busstra)
- Session 5 *Preparation paper: understanding fat soluble vitamin analysis*

Thursday 20 October

Analytical methods, data quality

- Session 1 Review of methods of analysis: vitamins (P Hulshof)
- Session 2 USDA approach in evaluating data quality (J Holden)
EuroFIR approach of data quality evaluation (M Roe)
- Session 3/4 14.00-14.45 Data quality evaluation, explanation of exercise (14.00-14.45)
15.00-16.00 Excursion to lab Division of Human Nutrition (P Hulshof)
- Session 4 16.15-17.30 Literature sources of food composition (M Renkema; R314)
- Session 5 *Preparation data quality evaluation exercise*

Friday 21 October

Data quality

- Session 1 Quality considerations in the compilation process (S Westenbrink)
Collecting data from manufacturers, approaches and pitfalls (S Westenbrink)
- Session 2 Data quality exercise: evaluation of published values in literature/existing data (J Holden, M Roe)
- Session 3 Data quality exercise: evaluation of published values in literature/existing data (J Holden, M Roe) & Documentation of quality issues (M Roe)
- Session 4 Identification of and documentation of food components/modes of expression (A Møller)

Saturday 22 October

Social event (optional)

Sunday 23 October

Languag and building a database

- Session 1 Food nomenclature, classification and identification in databases (J Ireland/ A Møller)
Authoritative resources for food nomenclature (A Møller)
- Session 2 Food indexing- exercise (J Ireland/ A Møller)
- Session 3 Food indexing – exercise (J Ireland / A Møller)
- Session 4 Basic principles for compiling and updating a food composition databases, (A Møller/J Ireland/)
- Session 5 *Course dinner*

Monday 24 October

Recipe calculations, database management issues

- Session 1 Approaches in recipe calculations (R Charrondiere)
- Session 2 Recipe calculations – exercise (R Charrondiere)
- Session 3 Documentation and interchange (A Møller)
- Session 4 Food labelling, nutritional claims and food composition (W van der Vossen)
- Session 5 *Exercise: database comparison*

Tuesday 25 October

Applications

- Session 1 Report back: database comparison (participants)
Biodiversity, dietary diversity and food composition databases (R Charrondiere)
- Session 2 Use of food composition data in nutritional assessment (J de Vries)
- Session 3 Consequences of random and systematic error in FCDB for nutritional epidemiology (P vantVeer)
- Session 4 Use of Food composition data by the food industry (A Roodenburg)

Wednesday 26 October

Applications / round-up /closure

- Session 1/2 Database management systems: theoretical and practical aspects (A Møller)
 - Demo: INFOODS compiler tool (R Charrondiere)
 - Demo: FOODCASE and other DBMS (S Westenbrink)
- Session 2/3 Food Composition data: role of INFOODS (R Charrondiere)
Use and abuse of food composition data (R Charrondiere)
- Session 3/4 Nutrition intake software (E Siebelink/S Meijboom)
- Session 4 Future directions? Is a country specific database essential? (all staff)
Closing of course, evaluation and awarding of certificates (all staff)

Preliminary list participants FoodComp 2011, per 3 October 2011

Country	Name/address
1. Australia	Ms B. (Betsy) Joseph Food composition evaluation & Modelling Section Food Standards Australia New Zealand 14 Maclagan street P.O. Box 7186 ACT 2607 Canberra BC ACT 2610 Email:betsy.joseph@foodstandards.gov.au
2. Ecuador	Ms S.V. (Sandra) Abril Ulloa Av. Eloy Alfaro 4-45 y V. Ibarra Cuenca Email: victoria.abril@ucuenca.edu.ec
3. Estonia	Ms A. (Ann) Joeleht National Institute for Health Development Hiiu 42 11619 Tallinn Email: ann.joeleht@tai.ee
4. Iran	Ms A. (Atefeh) Fooladi Moghaddam Secretariat Food Fortification Committee Food and Drug Division, Min. of Health & Medical Education Building #3, Enqhelab Ave, Fakhre Razi Ave 1314715311 Tehran Email: atefeh.fooladi@gmail.com
5. Italy	Ms S. (Sofia) Ioannidou EFSA European Food and Safety Authority largo N. Palli 5/A 43121 Parma Email: sofia.ioannidou@efsa.europa.eu
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7. Malaysia	Ms N. (Norhayati) Mustafa Khalid Institute for Medical Research, Nutrition Unit, CDNRC 50588 Jalan Pahang Kuala Lumpur Email: norhayati@imr.gov.my
8. Norway	Prof. A. (Anette) Hjartaker Department of Nutrition Institute of Basic Medical Sciences University of Oslo P. Box 1110 Blindern 0317 Oslo Email: anette.hjartaker@medisin.uio.no

9. Norway	Ms E. (Ellen) Kielland Norwegian Food Safety Authority P.O. Box 5333, Majorstuen 0304 Oslo Email: ellen.kielland@mattilsynet.no
10. Panama	Ms L. (Leticia) Gonzales de Nunez Calle 8va, Pueblo Nuevo, Interseccion con Ave "A" Hata Pintado, Los Harinos Email: leticiagonzalez.denunez@gmail.com
11. Panama NOT YET CONFIRMED	Ms Angelica Reyes Hernandez University of Panama Institute of analysis, University Courier Panama city Email: qm14areyes@gmail.com
12. Portugal	Ms M. da Graca (Maria) Dias Instituto Nacional de Saude Dr Ricardo Joge, I.P. Av. Padre Cruz 1649-016 Lisbon Email: m.graca.dias@insa.min-saude.pt
13. Portugal	Ms D. (Debora) Martins dos Santos Universidade de ciencias da Nutricao e Alimentacao Porto University rua do Mercado 220-1 Esq. Ermesinde - Valongo 4445-508 Email: deborams@gmail.com; deborams@fcna.up.pt
14. Sweden	Ms V. (Veronica) Ohrvik Dept. of Food Science University of Agricultural Science P.O. box 7057 75007 Uppsala Email: veronica.ohrvik@lmv.slu.se
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17. The Netherlands	Dr. S.S. (Sabita) Soedamah-Muthu Division of Human Nutrition Wageningen University P.O. Box 8129 6700 EV WAGENINGEN Sabita. Soedamah-Muthu, Sabita Email: sabita.soedamah-muthu@wur.nl

18. Ukraine	Ms N. (Nadiya) Boyko Uzhhorod National University Faculty of Medicine, Centre for Transborder Scientific Cooperation 46, Pidgirna Street Uzhhorod 88000 Email: nadiya.boyko@gmail.com
19. United Kingdom	Ms H. (Hannah) Pinchen Institute of Food Research Norwich Research Park Colney NORWICH NR4 7UA Email: hannah.Pinchen@bbsrc.ac.uk
20. United Kingdom	Ms N. (Nida) Ziauddeen MRC Human Nutrition Research Elsie Widdowson Laboratory 120 Fulbourn Road Cambridge CB1 9NL Email: nida.ziauddeen@mrc-hnr.cam.ac.uk

**10th International Post Graduate Course on the Production and Use of Food
Composition Data in Nutrition. Wageningen, the Netherlands
16th – 26rd of October 2011
Evaluation form**

We would like to have your opinion and comments on the various aspects and topics of the course. Please indicate on a scale from 1 to 5 (low to high) your evaluation following the programme of the course.

Introduction (*day 1*) Food comp overview/ EuroFIR lessons (*day 2*) (J Holden, P Hulshof, A Møller, J Ireland)

	(1)	(2)	(3)	(4)	(5)
Difficulty (1= very easy; 5= very difficult)	3	7	6	1	
Relevance/usefulness (1= not so relevant; very relevant)			3	7	7
Time allocated (1 = not long enough; 5 = too long)	1	3	9	3	1

Which items could be left out? ...all very useful, none

Which items were not (fully) covered?

Additional remarks / suggestions for improvement: very good lectures

Food & nutrient priorities / Sampling issues (*day 3*)(J Holden, H van der Voet)

	(1)	(2)	(3)	(4)	(5)
Difficulty		8	5	3	
Relevance/usefulness		1	2	2	12
Time allocated	2	4	9	1	1

Which items could be left out?

Which items were not (fully) covered?

- Sampling procedures (explore more)
- Sampling brands. I forgot to ask for that
- Practical samples in real situations, there are many difficulties to solve.

Additional remarks / suggestions for improvement:

- Lecture of v.d. Voet was more difficult but very nice
- It could be possible to teach more examples about sampling in different countries
- Very good lectures

Analytical Methods/ E-learning / Data quality (*day 4*) (C Busstra, P Hollman P Hulshof)

	(1)	(2)	(3)	(4)	(5)
Difficulty	1	2	8	6	
Relevance/usefulness		1	3	4	9
Time allocated	3	3	6	4	1

Which items could be left out?

Which items were not (fully) covered? Proximates, how to calculate measurement uncertainty

Additional remarks / suggestions for improvement:

- I could not understand all details but it was not necessary for me. But it was very useful.
- More detail in proximate calculations
- There was not enough time to do all the learning sent to us beforehand

Analytical methods / Data quality (day 5) (P Hulshof, M Roe, J Holden)

	(1)	(2)	(3)	(4)	(5)
Difficulty		5	7	4	1
Relevance/usefulness		2	3	7	5
Time allocated	2	3	8	3	1

Which items could be left out?

Which items were not (fully) covered?

Additional remarks / suggestions for improvement:

- It should include one of the good example papers that covers all aspects mentioned
- It would be good to go more into details for different nutrients where it can be different etc. This was very well done for macronutrients but as not as detailed for micronutrients
- It was useful but it has not my full attention
- I would have liked to have more lessons on this – especially vitamins more in detail

Data quality & documentation, compiling principles (day 6) (S Westenbrink, J Holden, M Roe, A Moller, J Ireland)

	(1)	(2)	(3)	(4)	(5)
Difficulty	1	4	7	4	1
Relevance/usefulness			3	6	8
Time allocated	1	2	9	4	1

Which items could be left out?

Which items were not (fully) covered?

Additional remarks / suggestions for improvement:

- I really liked the lectures of Suzanne and Joanne because those were really practical based

Food description, classification & identification (day 7) (A Moller, J Ireland)

	(1)	(2)	(3)	(4)	(5)
Difficulty	1	4	8	4	
Relevance/usefulness		1	2	6	8
Time allocated	1	1	12	3	

Which items could be left out?

Which items were not (fully) covered? Eurofir component thesauri

Additional remarks / suggestions for improvement:

Recipe calculation/ database management issues (day 8) (R Charrondiere, A Moller, J Ireland)

	(1)	(2)	(3)	(4)	(5)
Difficulty		4	3	8	2
Relevance/usefulness			2	6	9
Time allocated	4 *	4	5	3	

Which items could be left out?

Which items were not (fully) covered?

- Additional details example by using real recipe cooking would be useful

Additional remarks / suggestions for improvement:

- Practice more written direct instructions
- Difficult to understand the recipe calculations that Ruth showed in the excel file
- Ruth's lecture fits into my work
- Explanation how to calculate a recipe – and not explanation how to use the Excel file!!!
I know how to calculate, but If I wouldn't I had not understood what she does in this excel file.
- It is necessary more time to check it in the class
- An easy matter (recipe calculation) with this excel sheet seems to be very difficult; use of a better excel sheet to recipe calculation and not so prone to errors
- *) This is for the learning that we were expected to do before the course

Applications / role of Infoods (Day 9) (R Charrondiere, J de Vries, P van't Veer, A Roodenburg)

	(1)	(2)	(3)	(4)	(5)
Difficulty	1	4	8	3	1
Relevance/usefulness		1	7	6	3
Time allocated	1	3	9	3	1

Which items could be left out?

Which items were not (fully) covered?

Additional remarks / suggestions for improvement:

- Lecture of Pieter was too difficult for me, I could not keep attention
- Statistical lesson was very difficult, and when not familiar with this topic, hard to follow, but I think it was very important

Applications / round up /closure (Day 10) (R Charrondiere, A Moller, S Westenbrink, E Siebelink, S Meijboom)

	(1)	(2)	(3)	(4)	(5)
Difficulty	4	4	9		
Relevance/usefulness			5	10	2
Time allocated	2	5	6	4	

Which items could be left out?

Which items were not (fully) covered?

Additional remarks / suggestions for improvement:

- It was interesting but maybe less useful and a little repetitive from previous lectures

Excursion to in-organics laboratory (day 5) (P Nobels) & Library (M. Renkema)

	(1)	(2)	(3)	(4)	(5)
Difficulty	3	7	3	3	1
Relevance/usefulness	1	4	4	3	5
Time allocated	1	3	8	2	3

Which items could be left out?

Which items were not (fully) covered?

Additional remarks / suggestions for improvement:

- A more detailed lecture about macro-& trace elements by P. Nobels would have been interesting
- Excursions were nice, I liked the one to the library more than the one to the lab

Poster presentations by participants (day 2)

	(1)	(2)	(3)	(4)	(5)
Difficulty	5	8	4		
Relevance/usefulness		2	1	4	10
Time allocated	1	2	10	2	2

Project work (day 8/9/10)

	(1)	(2)	(3)	(4)	(5)
Difficulty		8	6	3	
Relevance/usefulness			4	4	9
Time allocated	1	2	11	2	1

Other general comments:

- Ability to share ideas /experiences / concerns:
 - very high
 - 4
 - more time to share ideas and concerns
 - excellent (2x)
 - very relaxed and good atmosphere (open to discussions and questions) which was great
 - good (2x)
 - very good/nice, nice to have so much time for questions/discussion/conversation
 - nice to meet people who are in very different situations and being together for a longer period and I hope we will help each other or share ideas how to solve problems
 - It is very interesting to meet people with experience in different fields of knowledge. It helps to create networks in the future
 - this course was very good for sharing experiences from different courses
 - the ability to share ideas etc. is good
 - excellent – very relaxed
 - very good
- Accommodation and meals:
 - could have been better
 - 5
 - OK
 - good (5x)
 - very good and well organized
 - great
 - very good (2x)
 - accommodation was good, meals with a lower content of spices
 - can be improved in variety of meals served
 - the accommodation and meals were excellent (2x)
- Course materials:
 - The created website was really useful
 - 5

- OK
- useful
- very detailed and good references. Very useful to have website
- course material provided on web is good to move
- right way to provide them on line
- good (2x)
- good, website is useful
- very good
- good and excellent (2x)
- excellent > v.good online references
- sufficient

- Length of course:
 - Long but interesting
 - 5
 - too long
 - good and just nice
 - bit tight but all good
 - good (5x)
 - nice length
 - good but the schedule is too tight
 - could be more, since there is too much information to absorb
 - very good

- Information received beforehand:
 - satisfactory
 - 4
 - very good
 - too many tasks to complete before the course
 - Homework (and pre-preparation) was quite late in being sent and would have perhaps benefited more if received earlier thus being able to devote more time to it
 - Information provided beforehand is always preferred. I did miss receiving them earlier and might also suggest to send them bit earlier providing more time to plan and do the exercises
 - Maybe it is too much to expect that we should have made the exercise for Ruth's lecture
 - I did not have the time to go through all the tasks
 - good (2x)
 - information was enough, but it would have been better we got them sooner
 - OK
 - not enough time to complete what was required
 - I would have liked instructions on sharing ideas on food comp tables if more attendants from the same country beforehand, so the slides can be more uniform per country (day 2)

How do you intend to use the various topics that were discussed at the course in your work?

- More critical in use of labels and food composition data. Unsure of other uses as will need to discuss ideas with colleagues

- I will use it for improvement of the national FCDB. During the course I got really a lot of ‘hands-on’ tips which I think will be very valuable. We also got some really good tools, a lot of enthusiastic and good ideas. Overall I think it has been A VERY GOOD and useful/relevant course!!!
- Overall it was very useful, some topics had more my interest than othes, but those were all useful. I can use a lot of the info in my work
- I know even more what we have to improve and I am now even more motivated to change these things and I really hope that I can manage this. thanks for giving me the possibility to learn all these necessary things. I need the knowledge to argue that we have to change many things!!!
- I will share this information with my colleagues. I will try to motivate more students and other people
to join my team of work to work in food composition tables for my country
- I hope to use this new knowledge in the improvement of my work in the future. Compiler now, I am more aware of ‘small’ defaults that are very important
- I will apply the standardize method in each step on construction of food composition database
- I got the whole picture so I can use the food composition table more efficiently and effectively. I am going to give short presentations when I am back to emphasise the importance of learning about food composition databases as a major pillar for food and nutrition policy and programs.
- there are so many things that I can use, to check new data, food names, documentation etc. I found this course very good and have an extensive basis to refer to and learn from.
- This course provided me with a good overview of food composition tables and all thoughts behind them. I enjoyed it very much especially the interaction with various teachers, wonderful group of international students and vary of teaching methods (lectures, assignments, emodule, calculation, discussion groups). The homework was too much for the 10 days especially Ruth’s work was not completed by everyone.
I would have liked more information on how to work out data from FFQ to a database in practice.

I consider myself as a:

- Compiler 9
- User 12
- Analyst 4

I received financial support to participate in this course:

- Yes 10, 1 partial No 6

If yes, please indicate the donor:

- EuroFIR 2
- Institute: EFSA, IUNS, own institute (5x), private company
- NFP
- UNU 1

I allow the FoodComp- secretariat to add my details to the FAO INFOOD-website:

- Yes 17
- No

ANNEX III: Food composition course Turkey 2012

Participants 11th Food Comp Course Turkey 2012

Name of Applicant	Country	Organization
Lidia Cosciug	Moldavia	Faculty of Moldova
Abdelrahman Lubowa	Uganda	Harvest Plus
Treerat Saiwan	Thailand	Institute of Nutrition, Mahidol University
Martial Ledoux	France	AFSSA Part no: 10
Rossemay Carpio	Peru	Wolfgang Grüneberg, PhD Sweet potato Breeder and Geneticist.
Urs Stadler	Switzerland	Federal Office of Public Health, Food Safety Division
Agnes Mwangwela	Malawi	Bunda College of Agriculture
Luhtala Salla	Finland	National Institute for Health and Welfare
Jelena Milesevic	Serbia	Institute for Medical Research, Center for Research Excellence in Nutrition and Metabolism
Fabiana Moura	USA	Harvest Plus
Onur Yaman	Turkey	private entrepreneur
Baumann, Soo Mee Beatrice	Germany/Burundi UN WFP Burundi	
Mrs. Jenna Rautanen	Finland	National Institute for Health and Welfare
Mrs Slavica Rankovic	Serbia	Institute for Medical Research, Center for Research Excellence in Nutrition and Metabolism
Senem AKKUŞ ÇEVİKKALP	Turkey	TUBITAK

11th International Postgraduate Course on Production and Use of Food Composition
Data in Nutrition

Gebze-Kocaeli, Turkey, 7-17 October 2012
Program, version 6, 25 September 2012

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Approximate time schedule: each session includes a 5-10 min break and 5-10 minutes discussion

9.00-10.30 Session 1
10.30-11.00 Coffee, tea break
11.00-12.30 Session 2
12.30-13.30 Break including lunch in TÜBİTAK restaurant
13.30-15.15 Session 3
15.15-15.45 Coffee, tea break
15.45-17.00 Session 4
17.00-18.00 transportation from TÜBİTAK to TUSSİDE
18.00-19.30 Dinner in TUSSİDE restaurant
19.30-21.00 Session 5 (optional)

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Sunday 7 October 2012

Introduction

14.30-15.00 Registration
15.00-15.30 Welcome and orientation (M. Kaplan/G Löker, P Hulshof)
15.30-16.00 Introduction to the course (P Hulshof)
16.00-16.45 Introduction of course participants and evaluation of the needs (P Hulshof, J Holden)
17.00-17.45 Welcome cocktail lounge
18.00-19.30 Dinner (together)

Monday 8 October

Food Composition overview

Session 1 Introduction to food composition data & databases (J Holden)
Setting priorities and selection of foods and nutrients (part 1)
Session 2 Country presentations by participants, part 1 (P Hulshof, chair)
Session 3 Country presentations by participants, part 2 (G Löker, chair)
Session 4 Literature sources of food composition (P Hulshof)

Tuesday 9 October

Food and nutrient priorities and sampling issues

Session 1 Setting priorities and selection of foods and nutrients-part 2 (J Holden & M Roe)
Session 2 Sampling of foods for analysis (J Holden)
Statistical principles underlying sampling procedures (J Holden)
Session 3 Design of sampling protocols -examples from USA and UK (J Holden & M Roe)
Session 4 Design of sampling protocols -examples from USA and UK (J Holden & M Roe)
Session 5 *Preparation paper: understanding vitamin analysis*

Wednesday 10 October

Analytical methods/data quality

- Session 1/2 Choice of analytical methods for FCDB (P Hulshof)
Review of methods of analysis: vitamins (M Yaman, P Hulshof)
- Session 2/3 Laboratory data quality (F Akçadağ)
- Session 3 Review of methods of analysis: E-learning: proximates (P Hulshof)
- Session 4 Review of methods of analysis: E-learning: proximates (P Hulshof)

Thursday 11 October

Analytical methods, data quality

- Session 1 Review of methods of analysis: energy, water, ash, alcohol (P Hulshof)
- Session 2/3 Value documentation and systems for data quality assessment (M Roe/J Holden)
- Session 3/4 13.30-14.15 Data quality assessment, explanation of exercise (M Roe/J Holden)
- 14.30-17:00 Excursion to lab + demo (G Löker)
- Session 5 *Preparation data quality assessment exercise*

Friday 12 October

Data quality and management

- Session 1 Data quality exercise: evaluation of published values in literature (J Holden, M Roe)
- Session 2 Data quality exercise: evaluation of published values in literature (J Holden, M Roe) Documentation of quality issues (M Roe)
- Session 3 Collecting data from manufacturers, approaches and pitfalls (S Westenbrink) Quality considerations in the compilation process – the EuroFIR approach (S Westenbrink)
- Session 4 Application Demo: FOODCASE (S Westenbrink)

Saturday 13 October

Social event (optional)

Sunday 14 October

LanguaL and building a database

- Session 1 Basic principles for compiling and updating a FCDB I (A Møller/J Ireland)
- Session 2 Food description, classification and identification in databases (J Ireland/A Møller)
- Authoritative resources for food nomenclature (A Møller/J Ireland)
- Session 3 LanguaL thesaurus (J Ireland/A Møller)
- Session 4 Food indexing – exercise (J Ireland/A Møller)

Monday 15 October

Recipe calculations, database management issues

- Session 1 Approaches in recipe calculations (H Reinivuo)
- Session 2 Recipe calculations, the EuroFIR approach – exercise (H Reinivuo)
- Session 3/4 Basic principles for compiling and updating a FCDB II:
- Documentation and interchange, including standards development (A Møller/J Ireland)
- Checking your data (J Ireland/H Reinivuo)

- Food data management systems: theoretical and practical aspects (A Møller/J Ireland)

Session 5 *Exercise: database comparison*

Tuesday 16 October

Applications

Session 1 Food Composition data: role of INFOODS (V Nowak)
Biodiversity, dietary diversity and food composition databases (V Nowak)

Session 2 Use and abuse of food composition data (V Nowak)

Session 3 Use of food composition data in nutritional assessment (J de Vries)

Session 4 Consequences of random and systematic error in FCDB for nutritional epidemiology (P Hulshof)

Wednesday 17 October

Applications / round-up /closure

Session 1/2 Food Composition data: EuroFIR, lessons learned (P Finglas)
Use of Food composition data by the food industry (B Amoutzopoulos/G Löker)

Session 2/3 Nutrition intake software (J de Vries)

Session 2/3 Quality assessment of FCDB for assessing exposure from diet: a case study in SE-Asia (P Hulshof)

Session 3/4 Report back, database comparison (participants)

Session 4 Closing of course, evaluation and awarding of certificates (all staff)

11th International Post Graduate Course on the Production and Use of Food Composition
Data in Nutrition. Gebze-Kocaeli, Turkey, 7-17 October 2012

Evaluation form

We would like to have your opinion and comments on the various aspects and topics of the course. Please indicate on a scale from 1 to 5 (low to high) your evaluation following the programme of the course.

Introduction (day 1) / Food comp overview (day 2) (J Holden, P Hulshof)

	(1)	(2)	(3)	(4)	(5)
Difficulty (1= very easy; 5= very difficult)	6	2	4	1	
Relevance/usefulness (1= not so relevant; very relevant)		2	3	3	5
Time allocated (1 = not long enough; 5 = too long)		1	7	4	1

Which items could be left out?

- None (2x), rest was empty
- Relevance was OK, but very basic and nothing new
- Everything was great

Which items were not (fully) covered?

- Not relevant
- Rest was empty

Additional remarks / suggestions for improvement:

- The country presentation by participants is a good exercise and an appropriate introduction
- Very good
- I knew this basic stuff already. However, it was a well-constructed summary of things
- There could be a standard for country presentations; so that participants would be able to compare each country
- Presentations on day 2 too long, beter to have shorter presentations and some exercises or group discussions in between
- This day is not very useful for compilers who have been already working with a database
- Very good introduction
- It gives you a good overview about the different issues

Food & nutrient priorities / Sampling issues (day 3) (J Holden, M Roe)

	(1)	(2)	(3)	(4)	(5)
Difficulty	2	2	6	3	
Relevance/usefulness		1	3	1	8
Time allocated	1	1	7	3	

Which items could be left out?

Which items were not (fully) covered?

- Practical aspects of sample collection

Additional remarks / suggestions for improvement:

- Design of sampling protocols – Ex UK: a good set of slides with appropriate figures is always better than a long speech, sorry!
- Very good
- This situation was well covered. The exercise was helpful
- Examples helped a lot but as a software engineer, I had difficulties in understanding details of sampling
- Bridging theoretical and practical aspects of sampling
- Better to give a good practical example and examples from developing countries context. Statistical principles could be shorter as not specific top FCDB
- Very basic for 'older' compilers. M. Roe's lesson was very interesting anyway.
- Statistics aspects need more time and practice with real life examples. It is so important to be ran over.
- The sampling exercises are very useful. The guidelines should be better defined and the examples should be given by the instructors.

Analytical Methods/ E-learning / Data quality (day 4) (M Yaman, F Akcadag, P Hulshof)

	(1)	(2)	(3)	(4)	(5)
Difficulty		4	4	2	4
Relevance/usefulness		2	2	3	7
Time allocated		6	4	2	2

Which items could be left out?

- The laboratory data quality could be left out. The vitamin analysis methods presentation was too complex.
- Data quality presentation was too long
- E-learning, I had no access

Which items were not (fully) covered?

- E-learning may be not perfectly appropriated. Proximate analysis would deserve a real course. Much easy to say than to do, I know
- The data quality presentation was not clear enough; so it was useless
- More information on food analysis
- The speech about laboratory data quality was very interesting

Additional remarks / suggestions for improvement:

- Very well
- People who are presenting various subjects should be better in English (especially for the lab data quality)
- Not very useful in my work but very interesting and maybe good to know in my work in the future
- Language of the teachers became a hindrance to clearly understanding of the principles

Analytical methods / Data quality (day 5) (P Hulshof, M Roe, J Holden)

	(1)	(2)	(3)	(4)	(5)
Difficulty		4	5	3	2
Relevance/usefulness		1	1	5	7
Time allocated		3	8	2	1

Which items could be left out?

- Analysis of sample during lab visits
- One example would be sufficient to illustrate
- The review of methods of analysis: vitamins, energy, water, etc, etc. should be given together

Which items were not (fully) covered?

- Analytical methods for different food matrixes

Additional remarks / suggestions for improvement:

- A visit to a lab is a great thing, but may be it is a loss of time to assist to a complete analytical protocol
- Very well
- This section could be shortened without lack of quality
- The more examples from 'real time' we can get, the more useful the information is. Mark's way of explaining things was very clear and he was well prepared
- Lab excursion was interesting and data quality was very useful. Exercise was very good.
- The concepts are not difficult to grasp but need some considerable discussion to sink in properly
- Good exercise about the data quality assessment

Data quality (day 6) (S Westenbrink, J Holden, M Roe)

	(1)	(2)	(3)	(4)	(5)
Difficulty		5	4	2	2
Relevance/usefulness			7	3	4
Time allocated	2		5	5	2

Which items could be left out?

- Maybe enough to have one shorter presentation to compare EUROfir to USDA system.
- As being one from Africa I felt like some were too Europeans
- One lesson for discussing the exercise should be enough

Which items were not (fully) covered?

Additional remarks / suggestions for improvement:

- Very well
- Lots of discussions about this. It was interesting to find out and speculate about the inconsequences between the USDA and EUROfir methods when it comes to data quality assessment
- The paper reading assignment was very helpful
- Quality consideration in the compilation process too complex and unclear

Food description, principles of compiling, Languag (day 8) (A Moller, J Ireland)

	(1)	(2)	(3)	(4)	(5)

Difficulty	1	3	5	4	1
Relevance/usefulness		1	2	7	4
Time allocated	1	4	6	1	2

Which items could be left out?

- Quite a lot of obvious things, but also quite interesting things
- Could move a bit faster

Which items were not (fully) covered?

- Languag/food indexing would have deserved a full exercise as a home work or something. Description of a food item is a crucial point and controlling this Languag software is an important point
- Rula – Thessauri
It is a new idea and I feel time was not adequate for this activity. Especially how it fills in with the whole FCDB

Additional remarks / suggestions for improvement:

- Languag is hard to use
- Very well
- Technical issues were the only problem. Maybe the Languag application could be available from online and participants could look at it before.
- Too theoretical, short time to practice Languag
- I felt that I was learning an essential European system of describing foods. It would have been useful to give it a developing world category flavor
- We did not compare the different sources of yield and retention factors

Recipe calculation/ database management issues (day 9) (H Reinivuo, A Moller, J Ireland)

	(1)	(2)	(3)	(4)	(5)
Difficulty	1	3	4	4	
Relevance/usefulness			2	2	9
Time allocated		4	4	3	2

Which items could be left out?

- The recipe calculation exercise was too long and it would deserve to be prepared on an Excel form, avoiding a time consuming use of 'calculetters'
- The recipe calculation exercises were basically all the same. Too much repeat.
- 4 exercises were too much, 2 would be enough

Which items were not (fully) covered?

- Recipe exercise
- We could have more in-depth exercises for recipe calculation especially with situations encountered when compiling data
- Information on how retention factors are analyzed, how reliable they are, how many there are for different cooking methods
- The way recipe calculations ends up in intake analysis or recipe calculation software. This was not done.

Additional remarks / suggestions for improvement:

- Building the formulas on an excel table could be a good exercise for recipe calculation and much quicker

- Time allocated for exercises was bad. It took too much time to solve questions. That was not necessary. They could be given as an assignment for the evening.
- The database Mg+ presentation was a bit hard. Maybe a hands-on demonstration would have helped
- Very well
- Documentation and interchange too broad and too complex
- I found the contribution to your data helpful

Applications I (Day 10) (V Nowak, J de Vries, P Hulshof)

	(1)	(2)	(3)	(4)	(5)
Difficulty		4	5	3	1
Relevance/usefulness			4	4	5
Time allocated		2	7	3	1

Which items could be left out?

- None
- Use and abuse of food composition data

Which items were not (fully) covered?

Additional remarks / suggestions for improvement:

- Consequences of random and systematic error in FCD and Epidemiology
- The topic needed more practical illustrations
- Very well
- All lectures were useful but as a software engineer I could not give my concentration on the subjects except for the 'use of food composition data in nutritional assessment' lecture
- Use of food composition data in nutri. assessments in relation to errors
- Course focusses a lot on EU and US context. Would be great to get more information on INFOODS FCT compiled in developing countries
- This felt quite universal, straight forward and very useful
- What about the interplay between food composition database and nutritional assessment and the problems that may arise

Applications II / round up / closure (Day 11) (P Finglas, B Amoutzopoulos, G Löker, J de Vries, P Hulshof)

	(1)	(2)	(3)	(4)	(5)
Difficulty	2	5	5	1	
Relevance/usefulness		1	3	3	6
Time allocated		2	11		

Which items could be left out?

- None
- Eurofir as well as INFOODS presentations would be better scheduled on the 1st days with the participants' presentations

Which items were not (fully) covered?

- All was well covered

Additional remarks / suggestions for improvement:

- Use of FCDB by industrial could join 'day to' courses
- Very well
- Demos could be made for nutrition intake software
- Very interesting, especially nutrition assessment programmes

- It was nice and instructive to see how the EuroFIRr system has developed but maybe the time could have been used for something else Nutrient Caloric Software – very useful

Excursion to laboratory (day 5) (G Löker)

	(1)	(2)	(3)	(4)	(5)
Difficulty	3	4	3	3	1
Relevance/usefulness	1	2	1	3	7
Time allocated	2	1	6	2	3

Which items could be left out?

Which items were not (fully) covered?

- Seen more laboratories

Additional remarks / suggestions for improvement:

- A visit to a lab is a great thing, but may be it is a loss of time to assist to a complete analytical protocol
- Was very eye opening on how laboratory quality control measures can be implemented. Even in a laboratory with limited resources there are good laboratory practices that can be used to improve the quality of analytical data coming out of laboratories
- Very well
- I am not that good with the stuff related to laboratory work (when it comes to analyses) so it was maybe too difficult but I managed to learn something as well
- This was one of the most interesting times of the whole course. Seeing in practice what we learn in lectures was very helpful
- Whole day should be allocated to lab analysis
- As space was limited in the lab, maybe better to explain before what can be seen and which analysis will be done
- It should be helpful to have more understanding of the basic working principles of the instruments. The source of food analysis was reasonably covered, but the working principles of the instruments was not.
- I used to work in a lab. I had preferred to visit a food production facility.

Presentations by participants (day 2)

	(1)	(2)	(3)	(4)	(5)
Difficulty	3	4	2	2	1
Relevance/usefulness			2	3	8
Time allocated	1	2	9	1	

Remarks / suggestions for improvement:

- The 'country presentation by participants' is a good exercise and an appropriate introduction
- More individual recommendation to participants to improve the current situation in FCDB after presentation
- There could be a standard/questions for these presentations
- Not enough time to discuss and possibly look at the single tables or databases
- Some participants had trouble to express themselves in English and it was hard to understand some of them

- In the future it might help to guide better on the format and content of presentations so that they would be somewhat more standardized.
- A detailed manual was missing also a suitable template

Other general comments:

Congratulations for the organisation. It is a lot of work!

Ability to share ideas /experiences / concerns

- Bravo to all the lecturers
- Very well
- Everyone was very friendly, helpful and nice. No complaints about that.
- The group was too quiet (including me), but I guess no one had problems in sharing ideas
- OK
- OK, more participation from participants would be better
- Location not very suitable to sit together and share experiences. Would be great to have also more time with the course trainers to discuss specific topics or questions in the evenings
- Location was bad (far away from everything).
- Excellent atmosphere but would have been better to have instructors from Africa to bring those experiences
- Could be better

Accommodation and meals:

- Accommodation +++++; Meals +, but well organized.
- Meals are the same every day, no variety (only beef). There were mosquitoes in the room, I do not know where they came from
- Very good
- Very well
- Food was poor quality and dinners were often exactly the same. I had problems with breathing during the night, because the air was poor quality/polluted. You should inform the next possible participants about the living conditions in advance.
- Some more social events could be organized
- Accommodation OK, but without social programmes, meals could be better
- Accommodation OK, venue without any social program.
Meals – same food almost every day (esp. for breakfast), however, plenty of vegetables and fruit
- Accommodation OK but not much to do in the evenings. Lack of nice atmosphere to spend time with other participants. Would have been nice to have a welcome and farewell evening in a restaurant, etc.
- Food/meals were awful
- No problems
- Was OK but somewhat too isolated

Course materials:

- Important material
- Wifi is not good available for all users and easy to lose
- Very good and helpful

- Very well
- OK, I am sure I will use the materials eg, search for information later
- Course materials were very useful, but the hard copy of the book would be great
- Need for more practical exercise
- OK, however need for more practical exercises
- Books unfortunately not available
- OK
- Did not get texts, course should provide selected texts
- Should be sent to participants early enough before starting the course

Length of course:

- OK (2x)
- Is too short
- Normal
- 10 days was enough; maybe after Saturday, Sunday could be left out for social events too
- Course is too long and arduous
- Inappropriate load of work for amount of days Good, but introductions and general part on FCDB could be a bit shorter
- A bit too long. An exercise with using different FCDB softwares would have been interesting
- Just about right
- OK, could possibly be reduced by the first Saturday

Information received beforehand:

- Should have been great to have known detailed opening and closure times long before to adjust air plane schedule
- Organiser should arrange and let information know better than this, what time, when, where, how do we go
- The time schedule cam in a bit late after we had booked our flights
- Very good
- Not sufficient , especially when it comes to practical issues
- I had no idea about accommodation (maybe because of being Turkish citizen)
- OK (2x)
- Very limited information beforehand and administrative information on course dates and programme too late
- Not enough
- Sufficient, but travel information and acceptance too late

How do you intend to use the various topics that were discussed at the course in your work?

- Very interesting course, when I arrive to my country I will start applying the topics in building of FCDB
- In becoming a compiler in Ciquil as performant as my colleagues (It is a goal!)
- I will use these topics that learn from this course to update and development my new National FCDB and also ASEAN FCDB.
- We are going to start a project to compile a FCDB. The material gained will be instrumental in putting down a technical proposal to our development partners. Within the database tools obtained we will work out what can be done using our

current resources. Materials will also be part of the MSc course and food and nutrient analysis, that I teach.

- 1. It will try to initiate a project for creating and implementing FCDB in my country;
- 2. I intend to update my course lectures with the knowledge gained here in order to make them more useful and interesting for students.
- Information of this course will be used during my entire career, future jobs, etc. For my current work I can definitely use the detailed description of methodology on the coming publication on retention study of biofortified maize. By the end of 2012 we are submitting the manuscript. Perfect timing!
- Analysis projects done in UK. I am comparing the work done there with what we are doing in my country. Lots of useful information about FCDB industry relations/cooperation. Lots of useful links and metadata, thanks!
- As a software engineer I am interested in numbers. Also in my work, I will need to create various software component that will use computational operations like recipe calculation. Taking into account that my project is about tracking nutrition intakes and making predictions, about future, most relevant lectures were recipe calculations, Languag and food composition databases usage.
- Further development and improvement of FCDB
- Further development of database (improve data) e.g. better food description, check out nutrient value, use methods presented to assess scientific papers, etc.
- The topics discussed are very helpful in better understanding how to read and use FCT to estimate the quality and validity of information and where to find background information. This will be relevant for using FC data to calibrate and validate food security and ???? quality indicators. It will also help to advocate for FCT in developing countries.
- All the material provided during the course (ppts, links, etc.) will be very useful. Thank you for this course, I really enjoyed and learned a lot.
- Improve specific values in FCTS used for our surveys; Course has increased awareness of the challenges related to FCT data with respect to nutrient intake evaluation of groups; Course has increased awareness of trends in FCDB/Food analysis in Europe and America that Africa can adopt or at least keep focussed on.

There were:

6 Compilers

3 Users

2 Analysts

2 Compiler/analysts

1 Compiler/user

I received financial support to participate in this course: Yes No

If yes, please indicate the donor:

Some of the participants were financially supported by the following institutes/organizations:

CIP

ANSES

USAID-Tufts University

VUP – Bratislava

Harvest Plus (2 participants)

EuroFIR (2 participants)

I allow the FoodComp- secretariat to add my details to the FAO INFOOD-website:
Most of the respondents agreed to this request



Certificate

This is to certify that

<name>

has successfully completed the

**11th International Postgraduate Course on Production and Use of Food
Composition Data in Nutrition**

**held at the Gebze-Kocaeli, Turkey from the 7th to 17th of October 2012
organised by the Division of Human Nutrition, Wageningen UR, The
Netherlands and TÜBİTAK Marmara Research Center, Food Institute, Turkey.
in co-operation with:**

EuroFIR Food Platform (EuroFIR- AISBL)

Background

A task within WP4 Training and Spreading of Excellence is organising, developing and coordinating training activities linked to EuroFIR NEXUS strategic objectives and stakeholder needs, and the coordination and optimisation of these activities. For this purpose, a survey was developed and carried out on training needs and requirements and offerings amongst NEXUS Beneficiaries and EUROFIR AISBL members between October and December 2012.

Methods

A questionnaire was developed and circulated amongst EuroFIR NEXUS Beneficiaries and EuroFIR AISBL members on 9th October 2012 by email as Word file, and two weeks later as an online file, asking about training needs and offerings. In November and again in December, reminders were sent to those individuals/ organisations that had not responded.

The questionnaire was also used as a basis to explore the needs of delegates attending the EuroFIR NEXUS Balkan Workshop (19-20th January 2013), which is reported elsewhere (D4.6 Final report on Balkan Food Platform and recommendations for future integration of WBC/ EECA countries).

Results

By January 2013, from a total of 26 beneficiaries, replies had been received from IFR, WU, ETHZ, NFA, IMR, SLU, VUP, ANSES, INSA, THL, INRAN, IARC, Topshare, RIKILT, UZEI, RIVM, IDUFIC, HERBALIFE, IEO and FCN, but not UCC, BNF, DFI or DTU (NEXUS Beneficiaries) or the majority of EuroFIR AISBL members (individuals and organisations).

Regarding production and use of **food composition data**, training in all seven areas is available for EuroFIR AISBL members (free or at reduced costs), and all but recipe calculation on a free or cost-paying basis to non-members. Five NEXUS Beneficiaries indicated training needs in five areas (Table 1).

Table 1. Production and use of food composition data

Q2	Offer	EuroFIR	Need
Food and nutrient priorities	WU, IMR	IFR	IEO
Choice of analytical method	WU, RIKILT	INSA	ANSES, RIVM
Sampling of foods	WU	IFR	
Data Quality/evaluation	WU, RIKILT	IFR, INSA	NFA, IARC, RIVM, IEO
Food nomenclature systems	IMR	IFR; INSA, IARC, IDUFIC	
Recipe calculation		IFR; IMR; IARC	NFA, IEO
DB management systems	NFA, VUP, IARC; RIKILT	IMR, IDUFIC	UZEI, IEO

Offer: free or cost-paying offer to all

EuroFIR: free or reduced cost-paying to EuroFIR AISBL members

Regarding analytical methods, equipment and facilities for **proximates** are available for EuroFIR AISBL members as well as non-members, except carbohydrates. However, one EuroFIR AISBL member and one NEXUS Beneficiary need training in carbohydrate analysis (Table 2).

Table 2. Analytical methods, equipment and facilities

Q3	Offer	EuroFIR	Need
Carbohydrates			INSA
Protein	WU, SLU, RIKILT	INSA	
Fat/fatty acids	NFA, SLU, RIKILT	WU, INSA	
Dietary fibre	SLU	INSA	WU
Alcohol	RIKILT		WU
Ash	WU, RIKILT	INSA	

Offer: free or cost-paying offer to all

EuroFIR: free or reduced cost-paying to EuroFIR AISBL members

Regarding analytical methods, equipment and facilities for **mineral analysis** (Ca, P, Mg, Na, K), only INSA and RIKILT offer training for EuroFIR AISBL members and non-members, respectively. No partner indicated a need. Analytical methods, equipment and facilities for **trace elements** (CL, Cu, Fe, I, Se, Zn) are offered, again, by INSA (not iodine) but also RIKILT to EuroFIR AISBL members and non-members. No partner indicated a need for training.

Analytical methods, equipment and facilities for all **water- and fat-soluble vitamins** are available for EuroFIR AISBL members and non-members from six NEXUS Beneficiaries, and six vitamins (A, E, riboflavin, niacin, B6 and C) from INSA for EuroFIR AISBL members only. NFA has established methods for all the vitamins listed whilst partners offering some analytes include INSA, WU, RIKILT and SLU. Carotenoid analysis is offered only by WU and, avenanthramides (non-vitamin compound) by SLU (Table 3). One partner expressed a need for vitamins D and K, folate, folic acid and B12 analytical methods, equipment and facilities.

Table 3. Vitamin analysis and other analyses

Q3	Offer	EuroFIR	Need
A	WU; NFA, SLU, RIKILT	INSA	
D	NFA, RIKILT		INSA
E	WU, NFA, SLU	INSA	
K	NFA		INSA
B1	NFA		
B2	NFA	INSA	

Niacin	NFA	INSA	
B6	NFA, RIKILT	INSA	
Folate	NFA, SLU		INSA
Folic acid	NFA, SLU		INSA
B12	NFA		INSA
C	WU, RIKILT	INSA	
Carotenoids	WU		
Avenanthramides	SLU		

Offer: free or cost-paying offer to all

EuroFIR: free or reduced cost-paying to EuroFIR members

Very few elearning opportunities are offered. Modules on 'Macronutrient analysis for non-chemists' and 'Vitamin' are available to EuroFIR members (free) and non-members (cost to be determined). On a cost basis, WU offers three modules on 'dietary exposure assessment', '(nutrition) requirements and recommendations' (1 ETCS) and '(human) study designs' (5 ECTS). IARC offers the EPIC-soft software, also on a cost basis, and IEO a module on 'nutritional epidemiology' for free. Costs were not specified. Topshare International BV offers support for the development of elearning tools. No webinars were offered.

Several other types of training were listed (Table 4). 11 partners offered to host trainees while four explicitly stated they were unable to host trainees (FCN, ANSES, IDUFIC, HERBALIFE), largely because of the nature of their business (micro-SMEs or research-based, i.e. not practical learning). No partner expressed the need for other (types) training needs.

Table 4. Other types of training and availability of placements

Q4/Q5	Institution
Documentation of food composition data	VUP
Practical analytical training	INSA, RIKILT
Cancer epidemiology	IARC (cost)
Cancer registration	IARC (cost)
Fellowships (awards)	IARC
Psychological or behavioural elements of consumer choice (free)	FCN
Willing to be host for visiting workers, trainees, students	WU, ETHZ, NFA, IMR, SLU, INSA, IARC, Topshare, RIKILT, RIVM, IEO

Summary and recommendations

A response from only nine (/26) NEXUS Beneficiaries, and few of the EuroFIR AISBL members (6) is disappointing. However, it may reflect the competencies of the NEXUS Beneficiaries and EuroFIR AISBL members, specifically provision of food composition information, which needs less support at the basic level. Training and access to methods, equipment and facilities for production and use of food composition data, and the analysis of all macro-/ proximates and micronutrients regularly required in food composition databases, is comprehensive with needs far exceeded by opportunities for training. The only exception is carbohydrates, which is

expressed as a need by INSA – one of the most experienced national compiler organisations – that is not offered by any of the others.

Recipe calculation is only offered for EuroFIR AISBL members, not non-members. Needs expressed by NEXUS Beneficiaries, EuroFIR AISBL members and non-member food composition organisations and individuals (e.g. dietitians) may be addressed with the launch of the new EuroFIR FoodBasket tool.

Six elearning modules are offered, under different conditions, generally, free for EuroFIR AISBL members and on a cost basis for non-members. Few other training opportunities are available although 11 NEXUS Beneficiaries are willing host trainees, suggesting there is the potential for exchange/ visits for capacity development amongst EuroFIR AISBL members or the wider Food Composition Community, subject to available funding.

Alternatively, the poor response to this questionnaire could it could be an indication the NEXUS Beneficiaries and EuroFIR AISBL members feel the current programme of training is not important, relevant or applicable to them. With that in mind a questionnaire seeking to determine satisfaction with EuroFIR AISBL products and services has been circulated, which includes questions are training needs only.

Recommendations:

- Develop EuroFIR AISBL Training Portfolio describing training available and costs, specifically in the areas of food composition data/ information (short [2 day] and long [5 days] courses) and elearning in cooperation with WU, and Project proposals and management in collaboration with RTDS (AT)
- Establish NEXUS Beneficiaries' terms and conditions for delivering training/ hosting after March 2013
 - ⇒ Obtain further information regarding methods and costs, certification, local support
- Advertise training opportunities widely to increase income and (potentially) membership, respectively
 - ⇒ Create training rolling training programme meeting EuroFIR AISBL members' need
- Match up training needs and offers, small (visits), medium (workshops) and large (satellite events at larger meetings, e.g. EU-funded consortia meetings, science conferences).

Questionnaire

EuroFIR AISBL supported by SLU must conduct a review of existing training offerings including:

- Short individual exchanges to support and encourage integration between beneficiaries/EuroFIR AISBL members
- Hosted training schemes to support transnational access and services for existing and new users for the Food Data Platform and tools in WP2
- Potential development for existing and new workshops, seminars, webinars and eLearning modules for members and external users from researchers, dietitians and health professionals, and industry

The final report should identify most suitable training offerings that could be self-funding and/or income generating for future exploitation by EuroFIR AISBL.

1. Member information

Name:

Organisation:

Membership status: Full Ordinary Associate

Full Member: as defined in Articles 6.3 and 6.4 of the Articles of Association

Associate Member: as defined in Article 6.5 of the Articles of Association

Ordinary Member: as defined in Article 6.6 of the Articles of Association

Address:

Country:

Web address:

E-mail:

Telephone number (include country code):

Please continue on a separate sheet as necessary

(e.g. other or additional analytes, questionnaire does not suit your institutional organisation)

2. Production and use of food composition data

(for specific methods of analysis – see Q3)

OFFER: Your organisation offers training for free (no cost) or on a cost-paying basis

OFFER EUROFIR: Your organisation will provide EuroFIR AISBL training for free (no cost) or at a reduced cost-paying basis

NEED: Your organisation needs training in this aspect of food composition

N/A – not applicable, not relevant to your organisation

	OFFER	OFFER EUROFIR	COST/ PERSON (if applicable)	NEED	N/A
Food and nutrient priorities	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Choice of analytical method	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Sampling of foods	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Data quality and evaluation	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Food nomenclature systems (e.g. food description, classification, identification, recipe calculation)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Recipe calculation	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Data base management systems	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Other, please specify:

Please continue on a separate sheet as necessary

(e.g. other or additional analytes, questionnaire does not suit your institutional organisation)

3. Analytical methods and equipment and facilities

OFFER: Your organisation offers training for free (no cost) or on a cost-paying basis

OFFER EUROFIR: Your organisation will provide EuroFIR AISBL training for free (no cost) or at a reduced cost-paying basis

NEED: Your organisation needs training in this aspect of food composition

NB: LEAVE BLANK IF NOT APPLICABLE

APPROACH: e.g. HPLC, GC-MS

Do not go into detail as we will follow up any needs as necessary

PROXIMATES:	OFFER	OFFER EUROFIR	COST/ PERSON (if applicable)	APPROACH (e.g. HPLC)	NEED	APPROACH (e.g. HPLC)
Carbohydrates/ saccharides	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Protein	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Fat/ fatty acids	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Dietary fibre(s)	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Alcohol	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Ash	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	

OTHER:	OFFER	OFFER EUROFIR	COST/ PERSON (if applicable)	APPROACH (e.g. HPLC)	NEED	APPROACH (e.g. HPLC)
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	

Please continue on a separate sheet as necessary

(e.g. other or additional analytes, questionnaire does not suit your institutional organisation)

MINERALS:	OFFER	OFFER EUROFIR	COST/ PERSON (if applicable)	APPROACH (e.g. HPLC)	NEED	APPROACH (e.g. HPLC)
Calcium	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Phosphorous	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Magnesium	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Sodium	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Potassium	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
TRACE ELEMENTS						
Chlorine	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Copper	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Iron	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Iodine	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Selenium	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Zinc	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	

OTHER:	OFFER	OFFER EUROFIR	COST/ PERSON (if applicable)	APPROACH (e.g. HPLC)	NEED	APPROACH (e.g. HPLC)
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	

Please continue on a separate sheet as necessary

(e.g. other or additional analytes, questionnaire does not suit your institutional organisation)

VITAMINS:	OFFER	OFFER EUROFIR	COST/ PERSON (if applicable)	APPROACH (e.g. HPLC)	NEED	APPROACH (e.g. HPLC)
Vitamin A	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Vitamin D	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Vitamin E	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Vitamin K	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Thiamine (B1)	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Riboflavin (B2)	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Niacin (B3)	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Vitamin B6	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Folate	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Folic acid	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Vitamin B12	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
Vitamin C	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	

OTHER:	OFFER	OFFER EUROFIR	COST/ PERSON (if applicable)	APPROACH (e.g. HPLC)	NEED	APPROACH (e.g. HPLC)
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	

Addition comments for analytical methods and equipment and facilities:

Please continue on a separate sheet as necessary

(e.g. other or additional analytes, questionnaire does not suit your institutional organisation)

4. Training

Briefly describe the training you or your organisation you is able to provide whether for free or on a fee-paying basis (e.g. elearning, lecture, course)

FREE: free for anyone participating

FREE (EuroFIR): free for EuroFIR AISBL members only

COST TO PAY: cost for everyone (please provide cost/ person in the final column)

COST TO PAY (EuroFIR): reduced rate for EuroFIR AISBL members (please provide cost/ person in the final column)

ELEARNING: TITLE, TOPICS AND LINK IF AVAILABLE	FREE (ALL)	FREE (EUROFIR)	COST TO PAY (EXTERNAL)	COST TO PAY (EUROFIR)	COST/ PERSON (if applicable)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

WEBINAR: TITLE, TOPICS AND LINK IF AVAILABLE	FREE (ALL)	FREE (EUROFIR)	COST TO PAY (EXTERNAL)	COST TO PAY (EUROFIR)	COST/ PERSON (if applicable)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

OTHER: TITLE, TOPICS AND LINK IF AVAILABLE	FREE (ALL)	FREE (EUROFIR)	COST TO PAY (EXTERNAL)	COST TO PAY (EUROFIR)	COST/ PERSON (if applicable)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

OTHER TYPES OF TRAINING: TITLE, TOPICS, FORMATS AND INCLUDE LINKS IF AVAILABLE	FREE (ALL)	FREE (EUROFIR)	COST TO PAY (EXTERNAL)	COST TO PAY (EUROFIR)	COST/ PERSON (if applicable)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Please continue on a separate sheet as necessary

(e.g. other or additional analytes, questionnaire does not suit your institutional organisation)

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

5. Hosting visit workers/ trainees/ students

Is your organisation willing to host / participate in short (1 week-3 months) 1:1 training activities for visiting workers, trainees, students?

The aim of these visits/ exchanges is for an individual to acquire new or develop existing skills, which will be applied by their host organisation to develop a national capability (e.g. food composition database)

Yes
 No

Other training opportunities?

Please provide brief details of any training activities we have not included here

Other training needs?

Please provide brief details of any training activities we have not included here

Please continue on a separate sheet as necessary

(e.g. other or additional analytes, questionnaire does not suit your institutional organisation)