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**Report of the First Symposium of the Capacity Development in
Nutrition and Food Research in Central and Eastern Europe
(CAPNUTRA): Balkan Food Platform - Regional Food Composition
Data Base development**

21-23 January 2013, Belgrade, Serbia

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www.agrowebcee.net/ncdn/
<http://www.youtube.com/watch?v=-8Dx9SkKsqo>

Introduction^a

The Network for Capacity Development (CD) in Nutrition in Central and Eastern Europe (NCDNCEE), has existed for several years (from 2005th) with support of UNU, SCN Working Group on capacity development, FAOREU in Budapest and several EC projects.

The definition of CD used is the same as that presented by Lopes and Theisohn in 2003^b, which was as follows:

CD in food and nutrition is more than formal training; it also includes human resource development, organizational, institutional and legal framework development with aim of enhancing knowledge and skills.

It was further pointed out that CD is a long term, continuing process, which gives primacy to national priorities, plans, policies and processes, and thus would never end.

The general objectives of the CEE Network were CD in the CEE area and extend the Network with more countries and more participants to support CD in research in CEE region Based on identified country specific needs.

The Network had one initial meeting in 2005 and a formal establishing meeting the following year, resulting in 7 meetings until 2012; results are published in scientific journals and the reports are available at the website:
<http://www.agrowebcee.net/ncdn/events/>.

The outcome so far of the present meetings of the Network's CD (see a definition development below under the chapter: Assessment of earlier CD activities) efforts has been considered very positive and useful by the participants. The UNU/SCN stop to support further the regional networks in 2012.

Finally the Network also discussed selected issues for follow-up, economy and sustainability in the future.

The NCDNCEE achieved lot and created great professional network with good experts from CEE countries so we decided to survive and continue work.

Therefore we decided to continue our activities in CEE region and established the NGO **Capacity Development Network in Nutrition in Central and Eastern Europe, CAPNUTRA** in 2012. A follow-up of NCDNCEE launched as CAPNUTRA, and this meeting was the 1st symposium of the CAPNUTRA.

Specifically the transformation of the network to the Non-profit NGO CAPNUTRA have made it possible to continue much of the CD activities, but economy is still worrisome, given the fact that UNU has backed out as a potential supporter.

^aThis report was based on the programme as can be seen in the annex of the report. However, the responsibility for any mistakes or omissions rests with the authors.

^b C. Lopes, T. Theisohn (2003) Ownership, leadership and transformation: can we do better for capacity development? Earthscan Publications Ltd.

There are many opportunities for further collaboration and one would be able to meet and discuss common and specific projects and approaches, and has provided a basis for common and country specific activities, and given important stimulus to CEE Network members. The members also can forge collaboration independently or in collaboration with others.

This meeting of the Network had 31 participants from various CEE countries (Appendix 2).

The agenda of the meeting see Annex 1, as well as at website:

<http://www.agrowebcee.net/ncdn/> ;

Photo gallery at website: <http://www.agrowebcee.net/ncdn/photo-gallery/>;

Short video: <http://www.youtube.com/watch?v=-8Dx9SkKsqo>.

01st day

The Network of CAPNUTRA

At the opening the participants were welcomed by Prof. Maria Glibetic, the head of the Centre of Research Excellence in Nutrition and Metabolism (CENM) Institute for Medical Research, University of Belgrade, Serbia She presented and explained the CAPNUTRA as the follow up of the NCDNCEE. The purpose and agenda of the meeting (Annex 1) were presented and the participants introduced themselves. It was also a brief historical development of CD in the UN Standing Committee on Nutrition (SCN), the progressive development of the NCDNCEE as a network and how it was supported by various agencies (UNU, FAO, and increasingly EC Project collaboration and support, and finally reviewing of the result achieved the years since the whole thing started; the discourse went all the way to CAPNUTRA and why it was developed.

This meeting was supported from EuroFIR Nexus and FAOREU and organized by CENM and CAPNUTRA.

EuroFIR AISBL - Nexus project achievements and future, Paul Finglas, Institute for Food Research, UK

One of the key achievements of the European Food Information Resource Network (EuroFIR) was the establishment of the EuroFIR AISBL new legal entity, which would form the basis of an international, non-profit association based in Belgium. EuroFIR AISBL (Association International Sans But Lucratif) is a member-based association, which works on scientifically based development, publication and exploitation of food composition data (FCD) and accompanying information in order to support and underpin research into food quality and safety, as well as into health. In addition, the Association would bridge the national FCDB compiler organisations and laboratories producing nutrient data, with users of food information from academia, industry and regulators. It will also seek to promote and develop quality assurance and traceability principles considering the implementation of the relevant international standards. Academia, industry, non-profit, governmental and policy bodies as well as researchers and students are welcome to join the Association as members. As such, one will have access to a wide range of food information, especially FCD including data on bioactive compounds with

putative health benefit, technical services, training opportunities, conferences, EuroFIR publications and to a European network of food composition data compilers, stakeholders, food industry and other contacts worldwide.

Development of Regional Food Composition Data Base (FCDB) of BalkanFood platform with EuroFIR-Nexus & NCDNCEE. Mirjana Gurinović, Maria Glibetić, IMR, University of Belgrade

Prof. Mirjana Gurinovic presented the collaboration between IMR and EuroFIR from 2006-2010 in FCDB development for Serbia and with EuroFIR-Nexus &IMR &NCDNCEE from 2011 until 2013 in Regional FCDB creation and identification the FCDB status and training needs in CEE countries^a.

During 2006 Institute for Medical Research (IMR) became a partner in NoE FP6 Euro FIR project (www.eurofir.net) (2006-2010). IMR research team developed the tool: Food Composition Data Management (FCDM) - web based software for creation new harmonized FCDB according to technical annex, EuroFIR standards and recommendations (Glibetic M 2010). Using this tool IMR Created the first online Serbian FCDB harmonized with EuroFIR recommendations with 1046 foods Languag food indexing. Partnership between IMR& EuroFIR together with the UNU/SCN Network for capacity development (CD) in Nutrition in Central and Eastern Europe (NCDNCEE) (<http://www.agrowebcee.net/ncdn>) (Pavlovic M. 2009) was central in establishment the contacts with compilers in non-EuroFIR CEE and MENANA countries for inventory of Food Composition Database Status (FCDB) and training needs in this region. Specific training needs and opportunities for collaboration in food and nutrition as well as lack of FCDB and software for database management in non-EuroFIR countries have been identified (Pavlovic M. 2009). Tailor made FCDB training workshops and CD activities and courses were organized with EuroFIR and NCDNCEE support and individual EuroFIR training bursaries were given to CEE and MENANA participants (Gurinovic M. 2010). Regional Workshop for Food Composition Data Base Development Belgrade, June 11th 2010 as initial meeting organized by UNU/SCN Network for

^a **References:**

Pavlovic M, Pepping F, Demes, M, Biro L, Szabolcs P, Dimitrovska Z, Duleva V, Parvan C, Hadziomeragic AF, Glibetic M and Oshuag A. (2009). Turning dilemmas into opportunities: a UNU/SCN capacity development network in public nutrition in Central and Eastern Europe. *Public Health Nutrition*: 12(8), 1046-1051.

Glibetic M, Kadvan A, Tepsic J, Debeljak Martacic J, Djekic-Ivankovic M, Gurinovic M (2010). Management of food composition database harmonized with EuroFIR criteria using a web application. *Journal of Food Composition and Analysis*. DOI [doi:10.1016/j.jfca.2010.09.002](https://doi.org/10.1016/j.jfca.2010.09.002)

Pavlovic M, Witthoft CM, Hollman P, Hulshof PJM, Glibetic M, Porubska J, Pepping F, Oshaug A. (2009). Training and capacity building in central and eastern Europe through the EuroFIR and CEE networks. *Food Chemistry* 113 (8):846-850.

Gurinović M, Witthöft CM, Tepšić J, Ranić M, Hulshof PJM, Hollman PC, Porbuska J, Gohar A, Debeljak-Martaćić J, Petrović-Oggiano G, Novaković R, Glibetić M, Oshaug A (2010). Capacity development in food composition database management and nutritional research and education in Central and Easter European, Middle Eastern and North African countries. *EJCN* 64, S134-S138.

Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE) with support from Institute for Medical Research, University of Belgrade (IMR). The aim of the regional workshop was to present possibilities and advantages of innovative web tool, and furthermore to stimulate participants to start creating a regional FCDB for Balkan countries using the IMR developed web tool which is in accordance with EuroFIR technical annex. Reports from the 2nd; 3rd; 4th and 5th NCDNCEE meetings from 2006-2011 are available at <http://www.agrowebcee.net/ncdn/events/>.

During the 2011 IMR became a partner of the EuroFIR-Nexus FP 7 project EuroFIR Food Platform: Further integration, refinement and exploitation for its long-term self-sustainability, EU FP7 2011-13) (www.eurofir.org). As the part of EuroFIR Nexus WP 4- Work Package 4. Training and spreading of excellence within EuroFIR-Nexus there is special Task 4 – Shaping and implementing Balkan Food platform with Network for Capacity Development in Central & Eastern European Countries. EuroFIR-Nexus together with IMR & NCDNCEE initiated a Balkan platform - with aim to develop a first Regional FCDB for West Balkan Countries (WBC) using a web based application Food Comp Data Management (FCDM) for creating national/regional FCDB.

CD meetings and workshops were organized to support development Regional FCDB such as:

- ✓ 6th Meeting of the UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE) Belgrade, 25th-26th May, 2011 was held Workshop: Regional Food Composition Data Base: Web based Food Comp Data Management (FCDM) software application in Balkan Food Platform development in Belgrade 26 May 2011.
<http://www.agrowebcee.net/ncdn/events/>.
- ✓ First Symposium-Capacity Development in Nutrition and Food Research in Central and Eastern Europe (CAPNUTRA): Balkan Food Platform - Regional Food Composition Data Base development, 21-23 January 2013, Belgrade, Serbia
<http://www.agrowebcee.net/ncdn/events/>.

Food Comp Data Management (FCDM) software was updated from IMR with Food coding to EFSA codes -Food EX2; Food coding to EFSA facets ; Recipe input – composite dishes data input and link with DIETASSES software for calculation nutrition values was established.

Serbia, Slovenia, Croatia, Macedonia –contributed to Regional FCDB with their national food composition data (Serbia recipes) and it is work in progress. Memorandum of Understanding (MoU) is signed between EuroFIR Nexus & IMR & CAPNUTRA, Federation of Bosnia & Herzegovina, Cyprus, Croatia, Republic of Macedonia, Republic of Moldova, Montenegro, Russia and Ukraine.

Identification of the FCDB status & training needs and opportunities for further collaboration is important for future CD in FCDB in this region and Balkan Food Platform development.

The development of the Regional Food Composition data base is a concrete result of collaboration between EU funded project EuroFIR-Nexus and NCDNCEE network.

The presentation of NCDNCEE activities in the past and the future. Arne Oshaug, Oslo and Akershus University College of Applied Sciences, Oslo, Norway, Mirjana Gurinović, Maria Glibetić, IMR, University of Belgrad

Prof. Arne Oshaug presented the NCDNCEE activities and results from 2005-2013 and talked a bit about the future.

The Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE) (<http://www.agrowebcee.net/ncdn/>) was established in 2005 to encourage capacity development (CD) in nutrition. NCDNCEE has joined several EC funded projects, including EuroFIR (www.eurofir.org), EURRECA (www.eurreca.org) and EuroFIR–Nexus.

The general objectives have been capacity development (CD) in the CEE area; to identify nutrition challenges; evaluate current status of nutritional education; to foster an exchange of knowledge and experience with European countries.

NCDNCEE meetings were arranged for identifying specific challenges in CD and training needs; implement workshops on nutritional tools/skills; establish collaboration between NCDNCEE and EU projects on nutrient recommendations collection and identification of CEE nutritional data for assessment of micronutrient inadequacy; collaboration in Food Composition Data Base inventory for FCDB status and follow up on training needs.

The NCDNCEE results are published in scientific journals and the reports are available at the website: www.agrowebcee.net/ncdn/. Matters of the utmost importance was an insufficiency of nutrition training (e.g. tailor-made training). Therefore, CD workshops (2006-2013) included: micronutrient recommendations; media communication training; presentation of nutrition tools; food composition data base development; collection and use of nutritional grey literature; micronutrient adequacy assessment in CEE; identification and prioritization of nutrition education needs; development of nutrition software and e-learning modules; WHO's new child growth reference standard; food and nutrition action plans; the right to adequate food as a policy tool and selected issues for follow-up and other activities in the future. Furthermore, development of regional FCDB Balkan platform is underway.

An impressive amount of CD activities was achieved in each country, guided by the plans, frameworks, leadership and the implementation of CD activities. As a summary, a video film was made (available at: <http://www.youtube.com/watch?v=OGAaVs3po-c>). In the period from 2005-2012 there were 7 NCDNCEE meetings; 15 workshops/trainings/courses; 4 publications in international journals (see references Pavlovic M., 2009; Glibetic M., 2010; Gurinovic M., 2010); 102 oral and 26 posters presentations at 20 international meetings. Reports from all NCDNCEE meeting are available at: <http://www.agrowebcee.net/ncdn/events/>.

CD in nutrition in CEE can be advanced via nutritional trainings (distance learning) and by cooperation with other European colleagues/ networks/projects. NCDNCEE has proven to be a mode to foster regional involvement and identify needs and opportunities in CD in nutrition in CEE. Further attention should be given to similar activities including NCDNCEE practise.

Mirjana Gurinovic was the chair of the NCDNCEE; it started (2005) and she is also the chair of the new body (CAPNUTRA). It should developed into something else than the NCDNCEE.

The second day:

Short country presentations: FCDB training and Capacity development activity needs

IMR and CAPNUTRA's leader team prepared questionnaires and Power Point presentation templates on Country training needs and sent them to country participants with a request to fill them beforehand the meeting. Below is summary of how participants presented some of the needs in their home country based on an updated questionnaire that was sent by email from main leaders and group. This summary is given after the meeting, by each country representative – participants of the meeting.

The situation in Croatia. Zvonimir Satalić, Croatia

In Croatia, there is a national FCDB, but it is now more than 30 years old, therefore, update and expansion of both food items and nutrients and other non-nutritive food components is necessary, however, currently there is no organized and standardized collection of food composition data. There are some software based on national FCDB, but are not used widely and are not publicly available. There is a potential in collection of grey literature food composition data and data from major national food producers; here a detailed instruction of what kind of data, sampling procedure, analytical methods, etc. would be useful when approaching food industry willing to contribute to regional FCDB with existing data and with conducting additional analyses. Network members would benefit with education on all aspects of FCDBs, and shorter education would be useful for stakeholders.

There is recent national food consumption survey within representative sample conducted by Croatian food agency and some previous ones (Coll Antropol, 36, Suppl. 1, 3-7.).

Various Laboratories of Faculty of Food Technology and Biotechnology have knowledge and equipment for determining some nutrients and phytochemicals of interest, however, additional training would be beneficial and these Laboratories are conducting such an analyses not primarily with the aim to report food composition data, but for other research purposes, nevertheless, here lies a potential of grey literature food composition data.

The situation in Cyprus. Stelios Yiannopoulos, Cyprus

In December of 2012, The State General Laboratory (SGL) has published the 3rd edition of the Cyprus Food Composition Tables (FCT) . The Cyprus FCT are in Greek, electronically available but not on line for the public yet. The English version is on the preparation stage. The software used is LIMS. The Cyprus FCDB is based exclusively on analytical data. The SGL strongly believes in the creation of regional FCDB. The main training needs in the field of production of FCDB are minimum and possible collaboration with EuroFIR- Nexus partners could be with researchers and master /PhD students. The SGL has the necessary equipment, facilities and analytical methodology for Nutrients, Mineral and Trace elements except for vitamins.

Three nutritional–food consumption surveys took place in Cyprus with publications: Two surveys by the Research and Education Institute of Child Health. (I) 2006-2008 the EXPOCHI Project for adolescence (11-14 years old) and (II) 2006-2012 the IDEFICS Study for children (3-10 years old).

One survey was carried out by the Cyprus Dietetic Association: 2005-2009 the 'Epidemiological Study to determine the Percentage of Obesity for adults (18-80 years old). The main nutritional tool was the Greek Cyprus Dietary Database, created by the University of Crete in 1998 and for the nutrient intake calculation the USDA was used.

The creation of national food database for the composition of foodstuffs consume in each country facilitates the proper evaluation of the relationship between food and consumers health. Hence validation of food data and software is important. Knowledge and Cooperation is vital especially in common software analysis.

Training (workshops etc.) among Cypriot nutrition professionals in the field of food composition databanks application is welcomed. Continuous Cooperation with the involve countries is essential.

The situation in Bosnia and Herzegovina. Aida Vilic Svraka, Bosnia and Herzegovina

Training needs of Public Health Institute of Federation of Bosnia and Herzegovina in the field of production of food composition databanks are in the following order:

- ✓ Steps in establishing a food composition database
- ✓ Food and nutrient priorities
- ✓ Choices of analytical methods for nutrients
- ✓ Sampling of Foods
- ✓ Food nomenclature systems
- ✓ Recipe calculation
- ✓ Data Quality and Evaluation
- ✓ Data base management systems
- ✓ Reviewing of existing data

Training needs in aspects of food composition data base are related to dietary fibres, vitamins (A, C, D, E, K, B1, B2, B3, B6, B12), folate and folic acid.

Training needs among nutrition professionals in the field of food composition databanks application are in the following order:

- ✓ Nutritional intake software tools application in dietary surveillance
- ✓ Dietary intake assessment methods
- ✓ *Harmonised methodology of dietary intake (nutrients, foods)*
- ✓ *Use of food composition data in nutritional assessment*
- ✓ *Epidemiology of public health nutrition*
- ✓ *How to include the human right to food and health in research*

Specific (research) tasks or training needs which our visiting staff benefit from experienced EuroFIR-Nexus partners are nutritional intake software tools application in dietary surveillance and harmonised methodology of dietary intake. Our suggestions for Capacity development in food, nutrition and health, and future recommendations for long-term sustainability are: capacity building (workshops, trainings, etc.) at regional level and on country level for countries that have particularly low capacities, exchange of experiences networking with other professionals in Region and Europe; receiving of up to date information in the field of nutrition; regional collaboration and involvement in joint regional activities and projects, joint publications.

The situation in the Republic of Macedonia. Igor Spiroski, Republic of Macedonia

Macedonia uses Kaić-Rak A., Antonić K.: Tablice o sastavu namirnica i pića (1990) FC tables and has electronic version of FCDB based on those tables. Tables are not in accordance with EuroFIR rules and creation of FCDB according to those rules is needed. Last Macedonian nutrition survey was done in 2011 by IPH and funded by UNICEF but didn't focus on intake or status but on dietary diversity in children. Training in data base management system and priorities for including foods is essential. Training in determination of vitamins and fatty acids in foods is of primary interest for food analysts. Methodology for dietary research should be harmonized in WB countries and FCDB to be used in this research should be available in all countries. Established regional cooperation among nutrition professionals in WB countries should sustain and develop.

The situation in Moldova. Lidia Cosciug, Moldova

Development of food composition country data for Moldova is necessary. The FCD in 3 volumes in Russian language are in use in Moldova. There are strong training needs among nutrition professionals in the field of food composition data banks application. Technical University of Moldova doesn't have at present the necessary equipment for quantitative analysis of nutrients. It would be a great help to assist and provide the ability to execute a qualitative analysis in modern equipped laboratories to study food composition data of local foods and traditional dishes. In this regard, possible subject for PhD fellowships to be performed in another institute (EuroFIR-Nexus member) may be the study and the accumulation of data needed to create a food composition data of local foods and traditional dishes. For long-term perspective can be recommended cooperation in the development of Balkan Food Platform with Moldavian FCDB and Nutritional Composition of Traditional Foods.

The situation in Montenegro. Ivana Joksimović, Montenegro

In the last few years in Montenegro, significant efforts and results have been achieved in drafting of legislation in the area of food safety.

Laws and regulations are only tools, though very important in order to improve food safety system, but the biggest challenge is their implementation due to lack of financial resources, human resources, coordination and expertise.

Continuous education, information and training of all subjects in the area of food safety is needed in order to ensure compliance with food safety systems of the EU.

We need more research than can be improved with the development of regional databases.

We don't have FCDB. We use old printed tables (author Jokic and ass). It would be useful for us to participate in development of FCDB.

For more activities we need trainings and financial support for database development.

These tables are useful for researchers, manufactures, doctors...

We need trainings in different fields of FCDB development.

We are not able to develop national database because of other priorities and lack of financial support.

Now, we use modern equipment and we hope that trainings will allow us to be active part of FCDB programs.

The situation in Russia. Olga A. Legonkova, Russia

Russia was presented by prof. Olga Legonkova as Scientific Secretary of Sector "Food" within Russian Technological platform "Bioenergy and Bioresources" and Senior scientist at Institute of Nutrition (Moscow) and by Tatjana Dolgova as the Head of Innovation Department of the Far Eastern Federal University (Vladivostok).

In the connection with the EuroFIR activity it was vital to show the activity of Russian Technological platform which is dealing with all aspects in the field of biotechnology and has such sectors as: food biotechnology, forest biotechnology, industrial biotechnology and agricultural biotechnology. Each sector tries to develop education, regulation and legislation, research infrastructure. And here it is interesting to pay attention to the Institute of Nutrition which is a leading one which kept up permanent cooperation with legislative and executive branches of Government, Ministries, different State Organizations. It has hospital and clinic and research departments (Enzymology, Basic Research Department, Medical and Preventive Nutrition Department, Department on Infants' and Children Nutrition...)

On the other hand the Far Eastern Federal University is the largest educational and research establishment on the Far East dealing with food.

According to the conducted questioning in Russia:

- ✓ Excessively low percentage of consumers think their health excellent and almost no one happy with their ration;
- ✓ Russian consumers are especially interested in increasing energy levels, more than half of consumers choose food that may stimulate activity;
- ✓ Based on results of completed data (weight and height), 35% of consumers suffer with overweight or obesity, but only 11% of them are aware of it;
- ✓ Russian consumers believe that food has a certain functional benefits, can reduce the risk of disease, and plays an important role in health;
- ✓ About three-quarters of consumers consider their food as healthy;
- ✓ Safety and price are the main factors, influencing on food choice.
- ✓ 52% of consumers considers that it is very important to know food ingredients origin;

- ✓ 60% of consumers believe that foods are the safest way to treat diseases;
- ✓ Nearly half of consumers consider that they are well-informed in health and nutrition, but the third part felt confused in choosing foods, and 47% don't understand the claims on food labeling.

As it is seen from the questioning and as Russia is a great market and a lots of foods come from outside, the collaboration within EuroFIR will be perspective and mutual activity.

The situation in Slovenia. Mojca Korošec, Slovenia

Slovenia has online FCDB that is freely accessible through OPEN platform (www.opkp.si). OPEN is bilingual, all components and majority of foods are in Slovene and English. The database comprises data for about 620 foods and dishes. Data for another 200 foods of plant origin deriving from Slovenia will be added in early 2013. The FCDB is created according to EuroFIR standards and LanguaL system is being used for food indexing. The majority of data in our FCDB are analytical. Data from FCDB are used by nutritionist or other professionals in hospitals, schools and kindergartens for meal planning and assessment, and by common public and students for assessments of meals or daily diets. The part of tables "Slovenian food composition tables – meat and meat products" was published in 2006 in Slovene language with English names of foods. Our FCDB is compiled mainly through different projects, supported by Slovene Ministries. Therefore the activities are only partially continuous and are also affected by a lack of team members. The main data provider and FCDB compiler is Biotechnical faculty, University of Ljubljana, while "Jožef Stefan" Institute is software provider and concerned about FCDB management. When Slovenia joined EuroFIR NoE LanguaL system was adopted for food indexing and CEN/TC 387 for food composition data. Collaboration with EuroFIR and NCDNCEE Network has contributed in capacity development, which was seen in better and faster actions in compilation of FCDB, higher success in applying for projects and in talks with nutritional policy makers, although the national funding has not increased since then. None of team members has attended Food composition course, however 3 members took part at NCDNCEE Network meetings/capacity development workshop for FCDB.

The situation in Ukraine. Nadiya Boyko, Ukraine

In Ukraine FCDB was recently introduced. In collaboration with EuroFIR in frame of BaSeFood project tasks realisation the Ukrainian Partners were trained for the food indexing by LanguaL. Prioritised traditional foods were documented and examined and incorporated to the EuroFIR profile in order to initiate the creation National FCDB. The main steps and tools of FCDB creation were provided in FoodCOMP two-week courses and DARIS software was provided during 1 week training in Ukraine by VUP Food Research Institute of Slovak Republic. Licensing Agreement were signed with 4 organisations – stakeholders of the DARIS software implementation. Within Capnutra project the Memorandum for collaboration with Balkan countries' network under umbrella of EuroFIR and newly developed software of recipes calculation had been probed.

There are potential organisations and network (Agro-Food Platform) in Ukraine are able to develop, apply and harmonise the UNFCDB to EuroFIR demands. To succeed this task the permanent and stable collaboration with EuroFIR are needed as well as specific for relevant activities (training, compiling work, introduction and dissemination of existent FCDB and benefits of it usage for the potential stakeholders, knowledge transfer etc.) sources of funds should be defined.

This work in Ukraine will find it further developments within realisation of TF30 and ODiN projects if supported by Commission. The opportunity to get the funds from national programs or any other alternative sources (food industry' representatives) will be carefully examined and support will be requested.

The situation in Serbia. Jelena Milesević, Serbia

After six years of different phases of development, when Serbia IMR became the EuroFIR partners in 2006 and in 2011 EuroFIR-Nexus in 2011, Serbian FCDB nowadays is run by FCDM software, created on EuroFIR standards, which is augmented with FoodEx2 (from 2012- EFSA project "Updated food composition database for nutrient intake"), CHANCE food groups classification and Languag codes. It contains 930 coded foods, and 116 traditional Serbian recipes, with ingredients and preparation description, cooking methods (and yield and retention factors applied according to EuroFIR recommendations). Serbian FCDB is within E-search facility in EuroFIR-Nexus project. Serbian FCDB covers 69 parameters- nutrients (energy, fats and FA, proteins and AA, carbohydrates- sugars, starch, fibres, vitamins, minerals, water, bio-active compounds e.g. carotenoids. Source of data for nutrients in Serbian FCDB are from chemical analysis of food samples, calculation of values (yield and retention factors), borrow values from other FCDBs and adopting values form scientific literature or food labels. Serbian FCDB is incorporated in DIETASSESS- dietary tool developed by IMR also using EuroFIR standards , which can be used for nutritional assessment of 24HDR; FFQ, food records, and nutritional planning (meals, menus etc.). Development of FCDB is work in progress, where we need more quality data, especially when it comes to traditional foods. On the other hand, with development of this and other nutritional tools we gain knowledge and practice that can be transferred to other countries in the network.

Identification of regional training needs and future priorities in food and nutrition research. Summary presentation by IMR, Serbia

The analysis was based on the response on a questionnaire from the participants. The questionnaire contained the following issues:

- ✓ *Training needs in the field of production of food composition databanks (workshops, seminars, courses, E-learning)*
- ✓ *Needs for analytical methods and equipment and facilities*
- ✓ *Is there any national/regional nutritional – food consumption survey conducted in your country*
- ✓ *Training needs among nutrition professionals in the field of food composition databanks application (workshops, seminars, courses, E-learning)*

- ✓ *Exchange programmes and other training needs*
- ✓ *Capacity development in food and health, and future recommendations for long-term sustainability.*

The summary provided the following situation:

- ✓ Majority of the countries expressed their needs in trainings on foods sampling, food nomenclature systems, recipe calculations, data base managements systems, steps in establishing FCDB and reviewing of existing data.
- ✓ All the countries presented nutritional consumption surveys conducted on their countries. However, in some countries information on dietary software is not reported, other countries used different nutritional tools. Some used their national FCDBs, while others borrowed data from USDA or neighbouring countries.
- ✓ All the countries reported on training needs in use of food composition data in nutritional assessment, nutritional intake software tools application in dietary surveillance, dietary intake assesment methods, harmonized methodology of dietary intake, human right to food and health in research , epidemiology of public health nutrition
- ✓ Countries express openness for collaboration in raising the recognition of nutritional research i.e. FCDB development among other stakeholders – food industry, politics, medicine etc.

EuroFIR Nexus - Presentation and Memorandum of Understanding (MoUs): principles and commitments to deliver food composition data to the Balkan Food Platform. Paul Finglas, Institute for Food Research, UK, Mirjana Gurinović, Maria Glibetić, IMR, Serbia and all participants (Their views, status, objectives and plans)

Paul Finglas presented the Memorandum of Understanding (MoUs): principles and commitments to deliver food composition data to the Balkan Food Platform

- MoU is document describing a bilateral or multilateral agreement between parties -will be signed with EuroFIR-Nexus.
- Draft MoU was presented at 6th NCDNCEE meeting in Belgrade May 2011 and sent to all NCDNCEE members for comments.
- EuroFIR Nexus -Deliverable 4.4-1st update of new MoUs with WBC/EECA and planned joint activities with other projects/network finalized and send the final MoU to EC and to network member to sign.
- MoU- agreement between Institute of Food Research representing the “EuroFIR Food Platform: further integration, refinement and exploitation for its long-term self-sustainability: Centre of Research Excellence in Nutrition and Metabolism, IMR, Belgrade, Serbia; Capacity Development Network in Nutrition in Central and Eastern Europe, CAPNUTRA; European Food Information Resource AISBL and

National food database compiler organisation from CEE

MoU is important for the purpose of enabling international harmonisation of

standards covering food composition data, all information and technical support.

Parties seek to collaborate in order to establish and/or develop the national food composition database and electronic dataset in “Country” accordingly to the European Food Data Standard and linked to the Balkan and EuroFIR Food Data Platforms.

In January 2013 MoU was signed from the following countries:

Croatia (2 institutions) ;Cyprus ;Bosnia and Herzegovina; Republic of Macedonia; Moldova; Montenegro; Russia and Ukraine. The plan is to collect sign MoU from all- it will be part of final Nexus deliverable 4.6. Final report on Balkan Food Platform and recommendations for future integration of WBC/EECA countries.

Regional Food Composition Data Base workshop

The overview of tools for Food and Nutritional research. *Mirjana Gurinović, Agnes Kadvan, Maria Glibetić, IMR, Serbia*

Mirjana Gurinovic presented several nutritional tools useful in research and CD in CEE region and in Europe ,developed by IMR research team in collaboration with EC FP6 projects EuroFIR and EURRECA ;EC FP7 project EuroFIR-Nexus such as:

- **Food Comp Data Management (FCDM)** -Software web based application for creating FCDB (national/regional), developed by IMR according to EuroFIR Technical Annex and recommendations (Glibetic M) . It was used for creation of the Serbian FCDB and now in developing Regional Balkan Platform.
- **EuroFIR eSearch**
- **EuroFIR - FoodBasket**
- **Nutri-RecQuest data base** A user-friendly tool offers valuable and comprehensive data base with an easy access to existing micronutrient recommendations.A database holding all data collected for the recommendations, as well as additional data tables (for example, with conversion factors for different units used). It contains recommendations for 29 micronutrients from 37 European countries and eight key non-European countries as well as general information about the source of these recommendations and scientific background information. The database contains information for different population groups; infants, children & adolescents, adults, elderly, pregnant and lactating women (Cavelaars 2010)^a. It is free available in web-based software tool via: www.eurreca.org; www.serbianfood.info/eurreca

^a References:

1. Cavelaars A E J M, Kadvan A, Doets E L, Tepšić J, Novaković R, Dhonukshe-Rutten R, M Renkema, Glibetić M, Bucchini L, Matthys C, Smith R, Van't Veer P, De Groot C P G M and Gurinović M. Nutri-RecQuest: a web-based search engine on current micronutrient recommendations, *Eur J Clin Nutr* (2010) 64: S43-S47;
2. Gurinović M, Kadvan A, Bucchini L, Matthys C, Torres D, Novaković R, Smith R and Glibetić M. EURRECA nutritional planning and dietary assessment software tool: Serbian FCDB with recipes. IMR compiler team

- **Web tool for extraction of data on nutritional adequacy intake , status and its determinants-** It can be used for the extraction of the data on micronutrient intake and status for all population groups; in addition it accommodates information on socioeconomic and cultural determinants associated with intake and/or status.
- **NutPlan** - NutPlan is a user friendly dietary software programme for implementing micronutrient recommendations with multiple functions, such as individual and group nutrition planning, creating food labels, diet planning. This application is of particular interest for Eastern European and West Balkan countries, which currently lack dietary software's. (GurinovicM 2010)
- **DIET-ASSESS**-Data entry (24h recall &FFQ) and dietary assessment tool

Serbian FCDB presentation with recipes. *IMR compiler team*

In this part it was firstly a short presentation of the history of the FCDB. Issues that were presented included:

- **May 2006** – IMR became a EuroFIR partner No. 44
- **2006** – FoodComp Course attendance for the first time
- **2007** – Serbian Food Composition Data Base coded in Languag (1143 foods)
- **End of 2007** – developed Food Comp Data Management software (FCDM) for FCDB based on EuroFIR technical annex directly linked to online FCDB
- **2007-2008** – first online FCDB in Serbia using the software **FCDM**
- **April 2011** – IMR became a partner in EuroFIR –Nexus, developing **Regional FCDB for WBC using FCDM software.**

In 2012 the IMR team became a partner in the EFSA project: “Updated food composition database for nutrient intake”. It made it also necessary to up-date of Serbian FCDB. This had many implications, including an update of the FCDB and adapted the software Food Comp Data Management (FCDM) to the EFSA codes (FoodEx2), which is use now in EFSA projects. Another project that the IMR team was engaged in was called CHANCE. That alloud to addressed food group classification again. Now the Serbian FCDB Contain 930 foods and 116 dishes (Serbian, traditional) with recipes. Another essential development was the link to EuroFIR that is going back to the year 2006. That made it possible to include the E-search facility of the EuroFIR- Nexus project.

So some of the work of the IMR-team in Belgrade was focusing on FCDB; one can see that it is a complex issue with many facets. Since support to the UNU disappeared one needed to find other sources which made it possible to meet and discuss, and thus be able to share experiences and learn from each other.

Web based Food Comp Data Management (FCDM) software development of BalkanFood Platform - Regional Food Composition Data Base, update with recipes;

Recipe input in Regional Food Composition Data Base (FCDM) and link with DIET-ASSESS Software. Agnes Kadvan, Jelena Milešević, Mirjana Gurinovic, Maria Glibetic IMR team, Serbia

The collaboration from 2006 between EuroFIR and IMR improved to date the quality Serbian FoodComposition Database.

In parallel with work on the Serbian FCDB the activities are started on regional FCDB for the countries in Balkan region. The FCDB were designed and created based on rules, standards and regulations defined in Technical Annex - EuroFIR document.

These definitions include the:

- Technical standards
- Database establishment standards
- The main entities food and parameters
- Functional details

The data in the FCDB are declared by two main groups of parameters:

- Nutritive parameters
- Other parameters (Languag and EFSA coding system)

'DIET ASSESS' is a software tool developed for nutrient intake questionnaires and nutrition planning. The connection between Serbian FCDB and 'DIET ASSESS' enables the use of food items and recipes with nutritive values from the database.

The innovations from the Serbian FCDB are implemented on Regional FCDB. The data from the updated Serbian FCDB is also uploaded into the regional database.

The regional FCDB contains 2045 food items from (Bosnia and Herzegovina (5), Croatia (974), Macedonia (9), Serbia (1046) and Slovenia (11)). The total number of chemical component parameters is 31731. The average no of parameters per food are 15.

On the practical part of the workshop all members installed the new version of the software and practiced to use the recipe creation.

Third day:

NCDNCEE sustainability plans: Introduction of the Capacity Development Network in Nutrition in Central and Eastern Europe, (CAPNUTRA); objectives, structure, members and activities and EuroFIR AISBL and EC projects collaboration. Maria Glibetić, IMR, Serbia

A description and analysis of the NCDNCEE Network was presented and discussed. The main objective was the establishment of a longer-term sustainable platform to continue

The activities of the NCDNCEE were among others:

- IMR research team developed the tool: Food Comp Data Management (FCDM) - web based software for creation new harmonized FCDB according to technical

annex, EuroFIR standards and recommendations.

- Created the first online Serbian FCDB harmonized with EuroFIR recommendations
- Partnership with EuroFIR together with the UNU/SCN Network for CD in Nutrition in Central and Eastern Europe (NCDNCEE) (<http://www.agrowebcee.net/ncdn>) was central in this endeavour
- Established collaboration with national contacts in non EuroFIR countries in CEE and MENANA
- An inventory of Food Composition Database Status (FCDB) – Identified the FCDB status in CEE countries and MENANA
- Specific training needs and opportunities for collaboration in food and nutrition in non-EuroFIR countries have been identified
- Tailor made FCDB training workshops and CD and courses were organized with EuroFIR and NCDNCEE support and individual EuroFIR training bursaries were given to CEE and MENANA participants Capacity development (CD) of a Food Composition Database (FCDB) is a long-term, continuous process, which focuses on national priorities, plans, policies and processes. 2006 - Institute for Medical Research (IMR) became a partner in NoE FP6 Euro FIR project (www.eurofir.net) (2006-2010)

This collaboration aimed to develop and integrate food composition database with EuroFIR through all of Europe, particularly for the CEE countries.

The concrete further action implies the creation of a non-profit association with international participation CAPNUTRA non-based in Belgrade, with all original NCDNCEE partners joining as Members. The main aim of the association is to support and promote development of nutritional research in CEE region through international cooperation. Sustainability could be achieved through collaboration with EuroFIR AILSB, EC projects collaboration, as a partner in EC projects, through COST actions, bilateral collaboration, national projects, etc.

Other initiatives:

Bilateral collaboration – Zvonimir Šatalić, Croatia

Previously validated food frequency questionnaire (FFQ) (Int J Food Sci Nutr 60 Suppl 5: 10) was administered to young women (n=709, age range 18-30 years) and the daily folate intake was calculated by using two FCDBs: Kaić-Rak & Antonić (1990) (FCDB1) and Regional FCDB (FCDB2). Folate intake measured by the FFQ was expressed as dietary folate equivalents (DFE) with 1.7 equivalency factor for folic acid from fortified foods and dietary supplements and factor 2 for folic acid from dietary supplements taken on an empty stomach. The average folate intake was 247 ± 400 and 252 ± 405 μ g DFE using FCDB1 and FCDB2, respectively, and the means didn't differ significantly. The average difference between the folate intake using two FCDBs was 5.7 ± 40.3 μ DFE. Folate intake among the studied sample of young women was below recommended 400

µg/day and regarding data for food folate, both FCDBs could be used interchangeably. These are the preliminary results of the bilateral project (Faculty of Food Technology and Biotechnology, University of Zagreb and Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade). The results were presented at the 6th Central European Congress on Food (CEFood 2012), Novi Sad, Serbia, 23-26 May 2012.

Cost action examples – Rašić Zorica, University Hospital Zemun, Serbia

COST, abbreviation of Cooperation in Science and Technology, is one of the widest intergovernmental European Network for coordination of nationally funded scientific and technical research. COST, together with EUREKA and the EU framework programmes (FP) is one of the three pillars of joint European research initiatives.

We explained the main characteristics of COST: “Bottom-up” programmes /no fixed priorities; “À la carte” participation -coordination of national efforts through networking; networks based on funded (research) projects; national responsibility; open to global cooperation in the mutual interest; building bridges between research communities; enabling agent – focus on early stage researcher; Pan-European dimension; scientific scope include pre-normative and public utility research and technologies; focus on multidisciplinary cooperation fostering innovation; equal access /open call and transparent procedures.

The COST programme, based on an inter-governmental agreement, is a long-running, economical and highly successful way to spread awareness and build networks between Europe’s researchers.

COST countries are 36 member states and one cooperating state, Israel. Serbia is one of member states. We introduced COST governance and partnership, and explained how does COST work. All COST Actions belong to 10 Domains. Each COST Action is a network centred on nationally-funded research projects in fields that are of interest to at least five COST countries. COST provides the COST Actions with financial support for joint activities such as conferences, short-term scientific missions, training schools and publications.

Finally, for every COST Action proceed Open call, two collection dates per year, following with fully electronic submission tool, remote assessment of preliminary proposals, invitation of best preliminary proposals to submit full proposals, review of full proposals by external experts, first remotely then in a consensus meeting, hearings of recommended proposals by DC representatives, prioritisation of proposals by Cluster, establishment of final list of proposals to be approved with approval of new Actions by CSO.

Involvement of individual SME, clusters and Chamber of Commerce, Role and Function of Cluster organisations. Herbal PharmaNet Cluster in Serbia. Pedja Cerović, Serbia

Clusters are defined as geographic concentrations of interconnected: businesses, specialized suppliers, service providers, firms in related industries and associated institutions in a particular fields that compete but also cooperate. Cluster emphasis is on

geographic or regional concentrations of one or more sectors and networking and cooperation between companies and institutions. Besides strictly geographic, clusters could be also sectorial (businesses operating together from within the same commercial sector), horizontal (interconnections between businesses at a sharing of resources level) and vertical (supply chain cluster). Types of actors that participate within clusters, cluster members, could be businesses (companies and their suppliers), service providers, supporting institutions, research and development institutions, public institutions (ministries, national and regional agencies), industry bodies (chamber of commerce, trade and business associations), and financial (banks, insurance companies, investment funds).

Based on the opportunities for innovation business development that clusters provide, companies from herbal sector in Serbia decided to establish “Herbal-PharmaNet” Cluster. The Cluster has been established in Belgrade in May 2012, as not-for-profit, non-governmental business association of private companies - manufacturers of herbal raw materials and herbal products - and institutions involved in the herbal sector. The cluster gathers 11 companies, producers of final products and suppliers of raw and semi-processed materials, and four supporting institutions. Main groups of products and value chains within the cluster are grouped in four sections: phytomedicine and traditional herbal drugs, dietary supplements, functional food (teas, fruit products), and cosmetics. Cluster "PharmaNet Herbal" was established in order to better exploit the potential of herbal sector of Serbia and stimulate a market-oriented cooperation and the strengthening of relationships between collectors and growers of medicinal plants, processors and producers of herbal products, and educational and research institutions.

Annex I

Monday, 21st January 2013, 16:00-19:00

- **Welcoming address**
- **Introduction of all participants of the Symposium**
 - **EuroFIR AISBL - Nexus project achievements and future**
Paul Finglas, Institute for Food Research, UK
 - **Development of Regional Food Composition Data Base of BalkanFood platform with EuroFIR-Nexus & NCDNCEE**
Mirjana Gurinović, Maria Glibetić, IMR, University of Belgrade
 - **The presentation of NCDNCEE activities in the past and the future**
Arne Oshaug, Oslo and Akershus University College of Applied Sciences, Oslo, Norway, Mirjana Gurinović, Maria Glibetić, IMR, University of Belgrade

Welcome dinner 19.30 at the hotel

Thursday, 22nd January 2013, 09:00-18:00

- **Short country presentations: FCDB training and Capacity development activity needs.**
Participants: Croatia (Zvonimir Satalić, Darja Sokolić-Mihalak), Cyprus (Stelios Yiannopoulos), Bosnia and Herzegovina (Aida Filipovic Hadziomeragic), Republic of Macedonia (Igor Spiroski), Moldova (Lidia Cosciug, Viorica Bulgaru), Montenegro (Ivana Joksimović), Russia (Olga A. Legonkova, Tatyana G. Dolgova), Serbia (Jelena Milesević), Slovenia (Mojca Korošec), Ukraine (Nadiya Boyko)
- **Identification of regional training needs and future priorities in food and nutrition research – summary presentation by IMR**
- **Nexus deliverable 4.6. Final report on Balkan Food Platform and recommendations for future integration of WBC/EECA countries (deliverable structure, contributions, timeline):**
IMR and network participants, Paul Finglas, Arne Oshaug (EuroFIR Nexus Scientific advisor)
- **EuroFIR nexus -Presentation and Memorandum of Understanding (MoUs): principles and commitments to deliver food composition data to the Balkan Food Platform (5-7min)**
Paul Finglas, Institute for Food Research, UK, Mirjana Gurinović, Maria Glibetić, IMR, Serbia and all participants (Their views, status, objectives and plans)

12.30-14.00 Lunch

14.00-18.00; Regional Food Composition Data Base workshop

- **The overview of tools for Food and Nutritional research.** *Mirjana Gurinović, Maria Glibetić, IMR, Serbia*

- **Web based Food Comp Data Management (FCDM) software application in development of BalkanFood Platform- Regional Food Composition Data Base, update with recipes, IMR compiler team**
- **Serbian FCDB presentation with recipes. IMR compiler team**
- **Recipe input in Regional Food Composition Data Base (FCDM) and link with DIET-ASSESS Software** (collection of traditional recipes from workshop participants, input of composite dishes ingredients into software, reporting for recipe nutrient content and input of recipes nutrient content ingredients into Regional Food composition data base). *Agnes Kadvan, Jelena Milešević, IMR team, Serbia*

19.00 Joint dinner and social event

Wednesday, 23rd January 2013; 09:30-12:30

- **NCDNCEE sustainability plans:**
 - **Introduction of the Capacity Development Network in Nutrition in Central and Eastern Europe, (CAPNUTRA); objectives, structure, members and activities.** *Maria Glibetić*
 - **EuroFIR AISBL and EC projects collaboration.** *Maria Glibetić, AISBL*
 - **Other initiatives:**
 - **Bilateral collaboration.** *Zvonimir Šatalić , Croatia*
 - **Cost action examples.** *Zorica Rašić, Universitz Hospital Zemun, Serbia*
- **Involvement of individual SME, clusters and Chamber of Commerce, Role and Function of Cluster organisations. Herbal PharmaNet Cluster in Serbia.** *Pedja Cerović, Serbia.*
- **Participant presentations of possible sustainability activities (5 min. each).**
- **Balkan platform recipe book, electronic and printed form.**
- **Conclusions**

12.30-13.30 Lunch

Annex II

List of participants and speakers

	COUNTRY	NAME	INSTITUTION
1.	NORWAY	Arne Oshaug	Oslo and Akershus University College of Applied Sciences
2.	UK	Paul Finglas	Institute for Food Research, Norwich, UK
3.	BOSNIA AND HERZEGOVIN	Aida Vilic Svraka	Institute of Public Health of Federation of Bosnia and Herzegovina

	A		
4.	CROATIA	Zvonimir Satalić	Laboratory for Nutrition Science, Faculty of Food Technology and Biotechnology
5.	CROATIA	Irena Colić Barić	Scientific committee Croatian Food Agency
6.	REPUBLIC OF MACEDONIA	Igor Spiroski	Dpt. Physiology and Monitoring of Nutrition, Institute of Public Health
7.	MOLDOVA	Lidia Cosciug	Technical University of Moldova
8.	MOLDOVA	Viorica Bulgaru	Technical University of Moldova
9.	MONTENEGRO	Ivana Joksimović	Institute for public health, Montenegro
10.	SLOVENIA	Mojca Korošec	Department of Food Science and Technology, Biotechnical Faculty, Ljubljana
11.	CYPRUS	Stelios Yiannopoulos	Ministry of Health State General Laboratory
12.	RUSSIA	Olga A. Legonkova	Scientific Secretary of Russian Platform “Food for Life”, Moscow, Russia
13.	RUSSIA	Tatyana G. Dolgova	Far Eastern Federal University School of Biomedicine, Vladivostok, Russia
14.	UKRAINE	Nadiya Boyko	Uzhhorod National University, Uzhhorod, Ukraine
15.	SERBIA	Zorica Rašić-Milutinović	Department of Internal Medicine, University Hospital Zemun/Belgrade
16.	SERBIA	Pedja Cerović	Herbal PharmaNet Cluster
17.	SERBIA	Marija Glibetić	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
18.	SERBIA	Mirjana Gurinović	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
19.	SERBIA	Agnes Kadvan	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
20.	SERBIA	Marija Ranić	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
21.	SERBIA	Jelena Milešević	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
22.	SERBIA	Slavica Ranković	Institute for Medical Research

			Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
23.	SERBIA	Marina Nikolić	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
24.	SERBIA	Marija Takić	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
25.	SERBIA	Vesna Vučić	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
26.	SERBIA	Danijela Ristić Medić	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
27.	SERBIA	Gordana Petrović Oggiano	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
28.	SERBIA	Snjezana Petrović	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
29.	SERBIA	Nevena Kardum	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
30.	SERBIA	Milica Kojadinović	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade
31.	SERBIA	Jasmina Debeljak Martačić	Institute for Medical Research Centre of Research Excellence in Nutrition and Metabolism, University of Belgrade

Training and capacity development needs questionnaire

Your Name:

Country:

Region:

Institution:

Address:

Contact Person:

Web address:

E-mail contact address:

Phone number:

Fax Number:

1. Training needs in the field of production of food composition databanks (workshops, seminars, courses, E-learning)

Please mark YES or NO

- Food and nutrient priorities (How to define priorities for including foods and nutrients in the database) **yes/no**

- Choices of analytical methods for nutrients **yes/no**

- Sampling of Foods **yes/no**

- Data Quality and Evaluation **yes/no**

- Food nomenclature systems (eg. Food description, classification, identification, recipe calculation) **yes/no**

- Recipe calculation **yes/no**

- Data base management systems **yes/no**

- Steps in establishing a food composition database **yes/no**

- Reviewing of existing data **yes/no**

Other training needs, please describe: _____

Possible areas for collaboration with EuroFIR –Nexus partners

Staff (technical/researchers/others):_____

Students (bachelor/master/PhD):_____

3. Analytical methods and equipment and facilities (Your organisation needs training in this aspect of food composition data base)

Nutrient	Need training (Yes/no)	Comment	Approach (eg .HPLC)
Carbohydrates			
Protein			
Fat/fatty acids			
Dietary fibre (s)			
Alcohol			
other			
Minerals	Need training (Yes/no)	Comment	Approach (eg .HPLC)
Calcium			
Phosporus			
Magnesium			
Sodium			
Potasim			
other			
Trace elements	Need training (Yes/no)	Comment	Approach (eg .HPLC)
Chlorine			
Copper			
Iodine			
Ioron			
Selenium			
Zinc			
other			
Vitamins	Need training (Yes/no)	Comment	Approach (eg .HPLC)
Vitamin A			
Vitamin D			
Vitamin E			
Vitamin K			
Thiamin (B1)			
Riboflavin (B2)			
Niacin (B3)			

Vitamin B6			
Folate			
Folic Acid			
Vitamin B12			
Vitamin C			
Other			

4. Is there any national/regional nutritional –food consumption survey conducted in your country:

- Country nutritional- food consumption survey : Yes/No

If Yes, please, answer to the following questions:

- Year of survey:
- Responsible Institute:
- Method of dietary assessment (24-HDR; food records; FFQ) :
- Population group:
- Sample size:
- Is there any dietary software/nutritional tool for food & nutrient intake calculation in use for dietary survey in your country (Yes/No):
- Which Nutritional tool/software you used for data entry, dietary intake assessment and data

analysis:

- Which Food Composition Data Base (FCDB) was used for nutrient intake calculation:
- Assessment of nutritional status measured by biomarkers of status Yes/No
- Publications and references regarding the survey and/or tool (Title, Author, Year of

publication):

5. Training needs among nutrition professionals in the field of food composition databanks application (workshops, seminars, courses, E-learning)

Please mark YES or NO

Use of food composition data in nutritional assessment	yes/no
Nutritional intake software tools application in dietary surveillance	yes/no
Dietary intake assesment methods-Selection of the best intake methods and assesment of inadequacy in intake	yes/no
Harmonised methodology of dietary intake (nutrients, foods) for design of nutrition monitoring and surveillance system in public health nutrition research -local/regional/national (Data Collection/Analyses/ Frequency of collection/Timeline/ Reporting)	yes/no
How to include the human right to food and health in research	yes/no
Epidemiology of public health nutrition	yes/no

6. Exchange programmes and other training needs

Describe which specific (research) tasks or training needs would your visiting staff benefit from experienced EuroFIR-Nexus partners. Could you also describe subjects for PhD fellowships to be performed in another institute (EuroFIR-Nexus member):

7. Capacity development in food and health, and future recommendations for long-term sustainability

For the "Final report on Balkan Food Platform and recommendations for future integration of WBC" please write your suggestions for Capacity development in food, nutrition and health, and future recommendations for long-term sustainability.

Thank you for kind collaboration!

Food Composition Data Base (FCDB) Questionnaire

Name:
Country:
Institution:
Address:
Web address:
E-mail address:
Telephone number:
Fax Number

1. Does your country have food composition database (FCDB)?

Please mark YES or NO

FCDB Status overview:

Please describe current status regarding food composition data in your country:

- There are printed food composition tables (available in language(s): _____):
YES NO
- There is electronically available FCDB with restricted access (available in language(s): _____):
YES NO
- There is electronically available FCDB with public access (available in language(s): _____):
YES NO
- There is online FCDB with restricted access (available in language(s): _____): YES NO
- There is online FCDB with public access (available in language(s): _____):
YES NO
- Additionally, there are software(s) based on national food composition data:
YES NO
- Food composition data available in my country is predominantly:
a) analytical or
b) borrowed from other countries food composition data or
c) I don't know?
- Please grade the importance of creating regional FCDB - *from 1 (not important) to 5 (very important)* :
1 2 3 4 5
- Please grade the potential of existing grey literature food composition data in your country - *from 1 (no such data exist) to 5 (great potential)* :
1 2 3 4 5
- Please write additional remarks, comments or clarification information:

If YES Please answer the following questions :	If NO Please answer the following questionS :
How many foods and how many nutrients do you have in your FCDB? Foods: Nutrients:	Why is your country missing FCDB (e.g. no responsible institute, lack of funds, equipment, professionals, training..etc)?
Is there permanent financial support of the database or only temporary? YES/NO	Will your organisation be able to carry on these activities, building the database and supporting it after a capacity building and training? YES/NO
Are the capacities of FCDB sufficient? YES/NO	Who would be the main users of the database if you had one?
Is your FCDB structured according to some standards or recommendations? YES/NO	If your country does not have national food composition tables which database is used as a source for compilation food composition data/ tables? What else do you use as a source of your data (e.g. food producers, labelling, etc.)?
Which one?	
How is FCDB usually used in practise in your country and who are the main users ?	

2. *Which organisation in your country is responsible for food composition data base?*

3. *Are you familiar with steps in establishing food composition database?*

YES/NO

4. *Did you already have collaboraton with NCDNCEE Network and EuroFIR?*

YES/NO

If YES please answer the following questions:

Capacity Development (CD) achievements in Food Composition Databases Questionnaire

QUESTIONS	ANSWERS
How has collaboration with NCDNCEE Network and EuroFIR contributed to capacity development	

in your country?	
How much new data has been added from the beginning of collaboration?	Foods: Nutrients:
Have you developed electronic version of the databases?	YES NO
Has national funding increased since the beginning of collaboration?	YES NO
Have you or your colleagues attended Food composition course? How many colleagues attended the course?	YES NO
Was it useful and applicable?	YES NO
Have you or your colleagues attended NCDNCEE Network meetings/capacity development workshop for FCDB? How many colleagues attended the course?	YES NO
Was it useful and applicable?	YES NO
Did you or your colleagues have individual training grants from NCDNCEE Network and EuroFIR?	YES NO
Your comments and suggestions for further CD for FCDB	

9. In this box please provide short summary of your answers to this questionnaire in the form of abstract not longer than 250 words (*to be included in the Report*):