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Report of The 6th Meeting of the UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE)

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www.agrowebcee.net/ncdn/

Introduction^a

The Network for Capacity Development (CD) in Nutrition in Central and Eastern Europe (NCDNCEE), has existed for several years with support of UNU, SCN Working Group on capacity development, FAO in Budapest and EC projects. This time the CEE Network has been supported by UNU, FAO and the EC funded projects EuroFIR and EURRECA.

The general objectives of the CEE Network were capacity development in the CEE area and extend the Network with more countries and more participants from each country. This time a central issue was to review the progress made since its start. Furthermore one also discussed specific disciplinary topics as requested by the participants at the first meeting of the Network in 2006, including food composition data base development in collaboration with EuroFIR, EURRECA's micronutrient assessment in CEE, Nutrition education needs in CEE, the right to adequate food, WHO's new child growth reference standard, and food and nutrition action plans. Finally the Network also discussed selected issues for follow-up and other activities in the future.

The Network had one initial meeting in 2005 and five meetings between 2006 and 2010; results are published in scientific journals and the reports are available at the website: www.agrowebcee.net/ncdn/. The outcome so far of the present meetings of the Network's CD efforts has been considered very positive and useful by the participants. Specifically the participants presented an impressive amount of activities, guided by the plans from earlier meetings of the Network. That included the arrangements, the leadership and the implementation of CD activities.

Seen by the Chair of the Network (M. Gurinovic, PhD, MD) and members of the NCDNCEE, the Network allowed members to meet and discuss common and specific approaches, and has provided a basis for common and country specific activities, and given important stimulus to CEE Network members.

The first day was devoted to what the Network has achieved, and the second day was focusing on the experiences, continuation and sustainability of the Network, particularly how it could have a continued link to EuroFIR (see the programme in the annex). This meeting of the Network had 32 participants from 15 CEE countries.

The agenda of the meeting is available at website:

http://www.agrowebcee.net/ncdn/ and Photo gallery at website:

http://www.agrowebcee.net/ncdn/photo-gallery/photo-gallery-2011/.

Video film is available at:

You Tube: http://www.youtube.com/watch?v=OGAaVs3po-c.

^aThis report was based on the programme as can be seen in the annex of the report. Some issues were not covered by the report. However, the responsibility for any mistakes or omissions rests with the authors.

The Network (NCDNCEE) Meeting

At the opening the participants were welcomed by Dr. Gordana Jovcic, the director of IMR, the University of Belgrade. The purpose and agenda of the meeting were presented and the participants were introduced. It was also a brief reviewing of the result achieved years since the Network started.

Assessment of earlier CD activities

The first day was devoted to CD activities that the Network had organised. As a reminder the definition of capacity development was showed and implications were discussed. The definition used is the same as that presented by Lopes and Theisohn in 2003^a, 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.

Mirjana Gurinovic Network chair, briefly reviewing the years behind, mentioned is the key activities of the NCDNCEE main results and achievement from 2006-2011.

Identified new training and nutrition education needs of the CEE area

Capacity development in nutrition is a process whereby individuals, groups, institutions, organizations and societies enhance their abilities to identify and meet challenges in a sustainable manner.

The UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE) (www.agrowebcee.net/ncdn/) has recognized that nutritional education needs improvement, however only a few countries provide a special academic education for nutritionists. For example, some NCDNCEE members have claimed that earlier to become a nutritionist involved often five year academic medical education with specialization in hygiene; furthermore no specific postgraduate studies for nutrition and it seemed to have been relatively low level of knowledge in nutrition epidemiology; it was also pointed out that there were lack of courses in nutrition for health professionals working with general populations.

These implications raised during the meetings have initiated formulation of a specific questionnaire that would explicitly focus on assessment of current situation in higher nutrition education in the CEE countries. The responses would help identify current needs in knowledge and skills development. Apart from that, the results of the survey will be used by NCDNCEE to establish cooperation with other institutions or networks for organizing trainings and workshops to increase

3

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

nutrition knowledge.

Thus there exist a knowledge gap, and this knowledge gap might be seen as one of the obstacles for envisaged lack of nutritional evidence from CEE countries. Fostering capacity development actions towards improvement of nutritional knowledge of CEE countries health professionals might be a step to overcome the barrier of low level of promotion and health education in public health nutrition.

Nutrition education needs in Central and Eastern Europe

By Zvonimir Satalic, Laboratory for Nutrition Science, Faculty of Food Technology and Biotechnology, Zagreb, Croatia; with contributions from Romana Novakovic, Marina Nikolic, Mirjana Gurinovic, IMR, University of Belgrade, Serbia, Arne Oshaug, Akershus University College, Norway.

A questionnaire was developed with the aim of identifying higher nutrition education needs in CEE and also educational needs of the educators themselves. The questionnaires were sent to the Network members that were responsible for the data regarding the situation in their country. The preliminary results of the questionnaires were presented at the II World Congress of Public Health Nutrition, Porto, Portugal, 23rd to 25th September, 2010. The results will be used by NCDNCEE to establish cooperation with other institutions or networks for organizing trainings and workshops for Capacity Development (CD) within nutrition. This knowledge gap might be seen as one of the obstacles for envisaged lack of nutritional evidence from CEE countries. Fostering CD for improving nutritional knowledge for public health nutritionists in the CEE countries included in this study might be one step to overcome the barrier of low level of health promotion and education in public health nutrition. It can be also interesting for the sustainability plan for EC projects like EURRECA and others.

The years behind – presentation of some key activities of the NCDNCEE main results and achievement of the NCDNCEE

Presentation of CD activities

The NCDNCEE sent out a questionnaire before this last meeting of the Network, asking the members to prepare for a presentation at the meeting; that included both a questionnaire about the FCDB status in their country and their activities as well as a template format PPT-file to facilitate and ensure the same type of presentations at the CD workshop. The members of the NCDNCEE presented the experiences of what they had done in their respective countries.

Topics covered in Network activities

By Arne Oshaug, Akershus University College, Lillestrom, Norway.

A number of issues were covered in these years of the NCDNCEE. The participants were reminded that capacity development (CD) in food and nutrition is more than formal training. It includes also human resource development, organizational, institutional and legal framework development with aim of enhancing knowledge and skills. Furthermore CD is a long term, continuing

process, which gives primacy to national priorities, policies, plans and processes. The participants also were reminded of the Framework for CD in nutrition in CEE countries, also included the planning guidelines developed early in the process. There were however some characteristics of the achievements of the NCDNCEE Network. It turned out that the focus had been basically on two levels, namely the institutional level and the educational level. One can say surprisingly much was achieved, thanks to the dynamics of the head of the Network, the hosting of this network at the University of Belgrade, and the excellently trained staff that also were very open to new ideas, and finally not the least the participants of the CD activities.

However, it turned out that the sector is still influenced by the Soviet era's heritage and culture – good and bad. There is a tendency to think that all from that Era in the Eastern part was bad and everything from the West was good. Unfortunately that is not the case. So the lesson learned in hindsight is that one should not adopt a bad Western policies and programmes, but chose good and relevant approaches based on the context and experiences of various European countries. Everybody realised the challenges with difficult issues such as transparency, accountability, obligations, gender equality, etc. This topic was covered by the CD activities in a session on the human right to adequate food.

Also technical training issues were covered, including useful professional tools and new approaches. Particular this was linked to terminology, approaches and methodologies varies between countries. Experiences showed that this can create difficulties, such as in sharing knowledge. Knowledge is central here. Experience showed that one often extrapolated from grey literature without being properly shared. Everybody knew that grey literature was important, but not the same as peer reviewed research papers. Everybody realised that academic trained of people who often end up as civil servants, but often they would not know how to use grey literature. This topic was therefore covered and information shared with other EC funded projects. The CD activity is a never ending story; it is continuous and we progress as we learn; an important lesson related to this is that we must be open to new approaches. When Lopes and Theisohn (2003) from UNDP underlined that CD takes time, it turns always out to be more than true.

Assessment of the CD activities in Federation of Bosnia and Herzegovina (FBH)

By Aida Hadziomeragic, Institute of Public Health of Federation of Bosnia and Herzegovina, Sarajevo, Federation of Bosnia and Herzegovina.

Initial expectations from joining the Network was regional collaboration in joint activities such as in projects, research, publications, capacity building through workshops, trainings, knowledge sharing, exchange of experiences and networking. Information disseminated via email or announced on Network's website were very important and useful to professional work, particularly news related to nutrition research, information on projects and their activities, on upcoming nutrition events, trainings, courses etc.

Activities in relation to cooperation between NCDN and other EU projects, EuroFIR and EURRECA involved provision of country data and completion of questionnaires; contribution and participation in network meetings and website; recruitment of new network members, participants and participation in courses, workshops; contribution and participation in joint application for projects and joint scientific papers, involvement of NCDN members as advisors at expert consultations (international project where IPH FBH was a partner), asking for advice on software for nutritional planning. Through NCDN following training sessions, courses and workshops were attended, particularly the session on WHO Growth Standards, session on Grey literature and media Training Session.

CD main achievements were: capacity development of FBH PHI stuff in FCDB, regional collaboration in joint projects, exchange of experiences, networking with professionals from Region and Europe, up to date information, international visibility of network and FBH as its member (scientific journals, other meetings), raised awareness on need for funding and establishing new activities in F BH (micronutrient recommendations, FCDB) and further capacity development in nutrition.

Status of FCDB in Federation of Bosnia and Herzegovina (FBH)

FBH does not have its own FCDB and the main reasons are lack of a responsible body, funds, equipment and trained personnel. With capacity development, training and above prerequisites Institute of Public Health of F BH (FBH PHI) could built and support the database. Main users of the FBH FCDB would be scientists and researchers, public health institutes, faculties, industry and consumers. There exists no official recommendation on how to use FCDB. However the most commonly used FCDB are from neighbouring countries (Croatia, Serbia) and the US databases. Other data sources used are coming from food producers', information given on labels and from own laboratory analysis.

The responsibility for a national FCDB is not officially specified, but according to the Law on Health Care it fits under the scope of work of Public Health Institutes.

The main achievement of the PHI collaboration with NCDNCEE Network and EuroFIR in FCDB activities were two professionals took FCDB course, Regional FCDB Initiative presented to the FBH PHI Scientific Board and joining discussed. Changes in managerial and political structure caused also professional problems, including delays. An electronic FCDB has not been developed jet, neither has national funding increased. Food composition courses have not been attended by participants from FBH, but the need is considerable.

NCDNCEE Network meetings/FCDB capacity development workshop has been attended by 2 participants from FBH, the CD courses on this has been very useful. No individual training grants to any of the staff from FBH have been received from NCDNCEE Network and EuroFIR. However, FCDB capacity development is considered very useful and should continue and further develop. It could expand to involve more countries; however it is important that one

approaches this in each country (contextualised). This could enhance effectiveness of CD efforts.

Assessment of the CD activities on the Bulgarian Food Composition Data Base

By Desislava Gyurova, National Centre of Public Health Protection

Bulgarian Food Composition Data Base included 828 foods with 37 nutrients for each food. It includes English food names and Bulgarian food names, No Scientific names, 828 food codes, Original Food Group, Nitrogen to protein conversion factor (NCF) and the Fatty acid conversion factor (FACF) were provided for a number of foods, LanguaL food description for all foods.

The 37 components for each food includes protein; animal protein; fat; SFA; MUFA; PUFA; cholesterol; CHO; DF; Na; K; Ca; P; Mg; Fe; Fe animal; Cu; Zn; Mn; Vitamin A; Vitamin E; Vitamin D; Vitamin C; Vitamin B1; Vitamin B2; Vitamin B6; Vitamin B12; Niacin; Folic acid; added sugar; alcohol; retinol; β - carotene; pantothenate; biotin; selenium and iodine.

The names of the components are in original language and in English, as well as corresponding EuroFIR component identifiers. The FOOD table contains records for 828 foods, but only 98 of these have nutrient values in the present data set. The full value documentation for 98 foods is after 1st January, 2008. All values are now expressed with 3 significant figures.

Bulgarian FCDB is structured according to some standards or recommendations:

- LanguaL food description
- EuroFIR Standard II. Technical Annex.

The National Centre of Public Health Protection (NCPHP), Sofia, Bulgaria is responsible for food composition database. The collaboration with NCDNCEE Network and EuroFIR contributed to capacity development in Bulgaria includes the following: EuroFIR workshops, training courses, contacts with various representatives and leadership of the Project, self training, only helped the professional growth of staff to learn the basic criteria for correct description, identification of foods and establishment and compiling of Bulgarian food chemical composition database.

Assessment of the CD activities and status of FCDB in Croatia

By Zvonimir Satalic, Laboratory for Nutrition Science, Faculty of Food Technology and Biotechnology, Zagreb, Croatia.

Food industry staff, nutritionists (counselling, diet therapy, menu planning in kindergartens, nursing homes, students' restaurants, etc.), scientists, health conscious individuals, small businesses, etc. are all highly interested in publicly available, user-friendly and adequate FCDB regarding quality and quantity of data. The current situation regarding FCDB in Croatia is that a publication from 1990 is used as a FCDB. The data was published by National Institute of Public Health (NIPH) and include information of approximately 600 food items and 30

nutrients. The database is compilation of analytical purposes, and used estimated and borrowed values from other countries. These are data for raw foods only and the database is not representative for the present day's food market. There are no plans for a revised publication by the NIPH in the near future that would include analytical data. However, since this is the only available source the database was included in the regional FCDB. The intention is to include analytical values in the regional FCDB provided by food producers and analyses of local foods published in peer reviewed journals. To motivate institutes, ministries and academia to contribute to the initiative, a probable way forward is participation in courses about both compilation and various uses of FCDBs.

Assessment of the Capacity Development activities in Estonia

By Tagli Pitsi, Department of Non-communicable Disease Prevention, National Institute for Health Development, Tallinn, Estonia.

Estonia's initial expectations to the network included communication, sharing of nutrition information and using the knowledge gained to further develop our own national food composition database. Taking part of network meetings and EuroFir trainings has proven to be most helpful. Estonia's biggest achievement up to date could be considered the development of Estonian Diet and Nutrition Database (www.nutridata.ee), which consists of three parts: Dietary Survey database (http://uab.nutridata.ee), Dietary Analysis Programme (http://tap.nutridata.ee) and Food Composition Database (http://tka.nutridata.ee). At the moment the Dietary Analysis Programme has two user levels - ordinary and institutional catering, but we are working on the scientific level to be able to use the program in nutrition surveys. By now, the program has nearly 20 000 registered users. For energy and nutrient calculation the program uses the Food Composition Database, which includes nutritional information on nearly 2500 most widely consumed foods in Estonia. Dietary Analysis Programme is available only in Estonian and is free for all users, one only needs to register. The Food Composition Database is also available in Russian and English.

Assessment and achievements of the CD activities in nutrition in Macedonia

By Igor Spiroski, MD, MPH Institute of Public Health, Skopje, Republic of Macedonia

The initiation of NCDNCEE somehow matched with the creation of the Department of Physiology and Monitoring of Nutrition at the IPH in Macedonia (previously joined with the Food Safety Department) and, in that time, we saw NCDNCEE as a "window of opportunity" for keeping the pace with the up-to-date information in nutrition in Europe and globally. The web-site of the network is a link between us and the network and also, via the network, to the other activities in nutrition around the world, particularly with the projects in which the NCDNEE coordinators are involved in as EuroFIR, and EURRECA. We transferred all of the information that we received via our participation in the NCDNCEE to the

management of the IPH and to concerned researchers within the institution, and stressed the importance of continuation of our participation in the network as, among other, our link to the important EU projects for exchange of excellence. All of the courses and workshops that we attended were used in our everyday work. Knowledge gained in the network was implemented in some other projects in which IPH is partner (Focus-Balkans, EU FP7 project) or as an implementing institution for MoH projects with UN agencies (UNICEF).

The status of FCDB in Macedonia

Macedonia doesn't have a national FCDB. Different reasons exist for that situation but no responsible institution and lack of funds are the primary obstacles. However, the Institute of Public Health (IPH) take on the activities related to establishment of FCDB. The main user of FCDB in the country would be the IPH for the needs of our everyday work in nutrition (including food safety) and the students we communicate with as a teaching base of the Faculty of Medicine. Also other interested stakeholders may use the FCDB. Since FCDB is missing we are usually using a local publication from 1990 and the USDA Nutrient Database for Standard Reference. Macedonia also used local analytical data for the products that come to the local laboratories and compare them with what the producers' claims on the labels. Collaboration with NCDNCEE Network and EuroFIR has been extremely helpful in approaching a FCDB for the area which was not addressed in our country. The biggest constrain for FCDB in Macedonia is no funds and time issues of the people working on FCDB. Regional database is great solution and tool for that purpose.

Assessment and achievements of the CD activities in nutrition in Moldova

By Olga Gutium, Technical University of Moldova, Chisinau, Republic of Moldova.

In Moldova one did not have time and recourses enough to track all the CD activities. Therefore only FCDB development is included here.

The status of FCDB in Republic of Moldova

No country-specific FCDB developed. However, research and academic institutions in Moldova have contributed in 1960s-70s with data to the elaboration and compilation of common FCDB. Chemical composition of food products in 3 volumes has been used throughout the former USSR republics, including Moldova. The main users of the FCDB in Moldova have been educational institutions within the courses in nutrition and dietetics; catering and foodservice; food industry enterprises; and new foods developers.

Stakeholders in the development of FCDB in Moldova:

 The leading role in issues related to nutrition is assumed by the National Centre of Public Health, but the relevant department is highly understaffed. It has therefore been impossible to address efficiently the task related to the development of country-specific FCDB.

- The National research Institute of Food Industry is generating data for the some food under investigation/development.
- The Technical University of Moldova is the only educational institution having full course of Human Nutrition in the curricula. However, some hours are devoted to nutrition within master level programmes in Public Health and Biology (State University of Moldova).
- Challenges in the development of FCDB in Moldova are several. The
 development of country FCDB is costly and is a laborious project. It
 requires funds, analytical methods, and trained professionals. Thus the
 challenges are considerable.

Potential of the Technical University of Moldova (TUM) to contribute to the development of FCDB seems good. TUM can partly contribute with some data to the development of the country database, as well to undertake training, acting as a partner with other relevant stakeholders in the country. TUM can therefore provide a platform of education in the usage of the regional FCDB.

Achievements in capacity development in FCDB are several. However, participants from Moldova have not attended food composition course. One TUM colleague has attended the CD workshop provided by the NCDNCEE in the frame of the 5th NCDNCEE Network meeting in November 2008. TUM is willing to participate actively if Moldova get's involved in the CD activities for FCDB.

Assessment and achievements of the CD activities in nutrition in Montenegro

By Ivana Joksimović, Institute for public health, Montenegro, Podgorica, Montenegro

In Montenegro one did not have time and other recourses enough to track all the CD activities. Therefore only FCDB development is included here.

The status of FCDB in Montenegro

Food Composition Data Base (FCDB) hasn't been established in Montenegro. Until now we did not participate in these activities due to lack of professional cadre, training and funds. We hope that after getting more information about your activities and achievements, as well as the problems that you met in developing a database of nutritional composition of foods, we will be able to evaluate the possibility of involvement in the creation of regional databases of nutritional composition of food for the Western Balkans. FCDB would be useful to different stakeholders, including researchers, producers and consumers. Up to now we have used tables of the chemical composition of food products.

The action plan for nutrition and food safety 2010-2014 in Montenegro is the umbrella document which should provide the basic guidelines for a comprehensive and coordinated response to improving public health related to food and nutrition.

Priority goals of the Action Plan for Nutrition and Food Safety 2010-2014 are:

- to reduce the prevalence of no communicable diseases related to diet;
- to reverse the trend of obesity among children and adolescents;
- to reduce the prevalence of micronutrient deficiency;
- to reduce the incidence of diseases transmitted by foodstuffs.

Assessment and achievements of the CD activities in nutrition in Slovenia

By Mojca Korošec, Department of Food Science and Technology, Biotechnical Faculty, Ljubljana, Slovenia.

The initial expectations of the Slovenian working group, when joining the Network, were improvement in the collaboration on the FCDB activities in the region and sharing of information and knowledge. This would support the activities on the national database creation and compilation. The website of the Network and information disseminated via emails were found welcome, since they provide information on novelties in the field and spare time for keeping up the pace with the important issues on FCDB. Slovenia is an associate partner of EuroFIR (Nexus) and as such has adopted the recommendations for FCDB creation and compilation, and indexing system (Langual). The members of the national team have attended some of the courses (BaseFoods Food Indexing course and Training for FCDB creation using web tool), where the experience was shared with other national team members for FCDB and implemented in our work. Although the importance of education programs in nutrition in Slovenia has been recognized independently from the Network, the participants to the courses have become relevant knowledge to implement and improve their lectures with. As could be observed, lack of capacity (professionals) may affect the quality of education programs, the number of which has grown in the last years.

The status of Food Composition Data Base (FCDB) in Slovenia

Since 2006 Slovenia has had its own FCDB. It contains 145 foods (meat and meat products) and 43 nutrients. All values were obtained from analyses. Responsible organisations for Slovenian FCDB are Biotechnical Faculty of Ljubljana University and Institute Jozef Stefan. The work on database is financed through different projects, but the support is only temporary. Currently the project on Composition of Plant Foods is ongoing. The local software for FCDB management, Optijed, was developed in one of previous projects. The database has also an electronic version and is structured according to EuroFIR recommendations. The users of the FCDB are many, including nutritionists and dieticians in hospitals, staff of day care centres, in schools and kindergartens; faculties and institutes for research and educational purposes; different associations and societies (athletes, oncology patients, allergy and autoimmune disease patients and celiac patients). The database is complemented with relevant data from other FCDB.

The status of Food Composition Data Base (FCDB) in Serbia

By Marija Djekic Ivankovic, Agnes Kadavan, Mirjana Gurinovic, IMR, University of Belarade.

First version of FCDB in Serbia was created in 2007. Background for Serbian FCDB was first electronic version of the food composition table created using the software developed by M. Gurinovic and A. Kadvan. In 2006 IMR became a EUROFIR partner. Two the most important achievements of that collaboration were creation and development of software Food Comp Data Management (FCDM) and Serbian FCDB.

Food Comp Data Management (FCDM) is a web based software for creation harmonized new FCDBs according to technical annex, EuroFIR standards and recommendations. New version of Serbian FCDB was created in 2008 using the software FCDM. One year later Serbian FCDB was posted online and till now has up to 57 nutrients and 1143 foods specific for our country.

Basic entity in the database is food with information on names and/or other Identifiers, Standard Food Classifications and coded with LanguaL as international controlled vocabulary for systematic food description. Every food has information on micronutrients, macronutrients, method Specification, Acquisition type, Quality Assessment and Reference. Related entities are recipes with all ingredients and retention factors, as well as sample information. Several search options are available to find the foods and detail information (search based on alphabetical order, food groups, nutrition values, food name / part of food name / bar code and on regions.

Also Serbian FCDB has e-search and web services facilities which allows database linking and comparability between FCDBs as well as good communication and easy data interchange.

Regional FCDB

In June 2010 initial meeting was organized in Belgrade for the development of Regional FCDB as an activity of NCDNCEE Network. Regional FCDB was created using the software FCDM which allows Integration of foods from the Balkan countries and exiting databases or tables to the Regional Food Composition data base. The base for this was Serbian FCDB. Regional FCDB has up to 57 nutrients and 1046 foods specific for CEE and Balkan countries. Report available at:

http://www.agrowebcee.net/ncdn/home/?tx_ttnews[pointer]=1).

How was NCDNCEE –EURRECA NoE cooperation? The results of EURRECA and Network activities

By Mirjana Gurinovic, Romana Novakovic, Maria Glibetic, IMR, University of Belgrade.

NCDN members have collaboration and support from EURRECA from 2007. There are on-going activities from the beginning of the project: in collection of the current recommendations from the CEE countries; training about Grey literature and collection of the relevant studies from national nutritional studies for EURRECA about nutrient intake and status - nutrient adequacy assessment; introduction and testing EURRECA nutritional tools; collection of different questionnaires useful for EURRECA sustainability challenges in CEE

region. During the EURRECA Warsaw course several members from CEE participated and also during joint training EURRECA & NCDNCEE in 2008/2009 during 3, 4 and 5th Network meeting (see reports: http://www.srbnutrition.info/?page=Network; http://www.agrowebcee.net/ncdn/). During the 2nd EURRECA week, Budva, Montenegro 9-13 June 2008, 5 members from NCDNCEE participated at the meeting with EURRECA support.

Members of the NCDNCEE contributed to the collection of the current recommendations which are included in the Nutri-RecQuest tool developed in EURRECA and offers valuable and comprehensive data on micronutrient recommendations from European and key non-European countries for scientists, policy makers, health professionals and industry. It is now free access via www.eurreca.org.

Regarding the nutrition education status and needs in CEE - The NCDNCEE for CD (www.agrowebcee.net/ncdn/) has recognized that nutritional education needs improvement when compared to Western countries. Specific questionnaire that explicitly focus on assessment of current situation in higher nutrition education and training needs in the CEE countries we developed and sent to all NCDNCEE members. The power point presentation "Nutrition education needs in Central and Eastern Europe - The challenges for Capacity Development" was available at EURRECA intranet, under non-EURRECA related activities.

The other questionnaire about their interest in EURRECA e-learning tools show their great interest in CEE region and that was a good reason to continue on developing e-learning tools.

Collaboration with UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE) enables contact with key stakeholders from CEE (academic and non- academic institutions). This network is updated with EURRECA achievements and this link can be further used for dissemination of EURRECA output in CEE.

Micronutrients intake/status adequacy assessment in CEE countries

By Romana Novakovic, Danijela Ristic Medic, Marina Nikolic, Mirjana Gurinovic, IMR, University of Belgrade, Serbia.

The meeting also presented the collaboration between the NCDNCEE and the EC funded project EURRECA. The aim of EURRECA was to produce a transparent, systematic and sustainable framework for use in deriving at dietary recommendations, in this case particularly for micronutrients. The work in EURRECA was following the NCDNCEE almost from the start. EURRECA has worked on many issues, but primarily on assessment of inadequacy of micronutrient intake, basically focusing on low income populations and immigrant population. The NCDNCEE addressed the issue of grey literature which was followed up by many training sessions by EURRECA. Members of the NCDNCEE took often part in courses organised by EURRECA. Many lessons were drawn from the EURRECA work. It included the development of new statistical model to derive micronutrient requirements based on evidence from

associations between intake of micronutrients and health status. EURRECA discussed with experts from different disciplines, and combed this new knowledge with quantitative evidence, and thus provide models for recommendations and assessment. One may also point out that EURRECA disseminated widely and had many active partners from academic institutions, public enterprises and private companies.

A web-based tool on current micronutrient recommendations - Nutri-RecQuest

By Agnes Kadvan, Mirjana Gurinovic, IMR, University of Belgrade.

The EURRECA (EURopean micronutrient RECommendations Aligned) Network of Excellence (www.eurreca.org) collated current micronutrient recommendations. A user-friendly tool, Nutri-RecQuest was developed to allow access to the collated data and to create a database source for use in other nutritional software tools.

Recommendations i.e. intakes of micronutrients sufficient to meet the requirements of the majority of healthy individuals of that population from 37 European countries /organizations and eight key non-European countries/regions comprising 29 micronutrients were entered into a database. General information on the source of the recommendations as well scientific background information was added.

A user friendly web-based interface was developed to provide efficient search, comparison, display, print and export functions. Having collated countries' recommendations is a prerequisite for official bodies to review existing evidence and provide a tool to set updated harmonized European recommendations. Additional benefit in scientific domain is comparison and analysis of existing nutritional data with this repository. Given the number of recently developed nutritional softwares, it's envisaged as an auxiliary tool to those softwares where any of comparison or calculation of individual/ group diet planning is needed. Adding related dietary reference values such as average nutrient requirements and upper limits may extend the utility of the tool. Nutri-RecQuest offers valuable and comprehensive data on micronutrient recommendations from European and key non-European countries for scientists, policy makers, health professionals and industry. Access free via: www.eurreca.org.

Improving nutrition: what approaches and priorities for an effective intersectoral action?

Eleonora Dupouy, PhD, Food Safety and Consumer Protection Officer for Europe and Central Asia, FAO, Budapest, Hungary

In the presentation it was provided a brief on the FAO's work in nutrition, the central role agriculture plays in diversifying diets and approaches for intersectoral partnership in raising levels of nutrition. It was highlighted the relevance of safe and secure food supply to the adequate nutrition and have been introduced the FAO programmes in strengthening capacities of member countries in ensuring food safety along the food chain and improving food and

nutrition security. Acknowledging that improving nutrition is a multi-sectoral task that requires coordinated multi-sectoral solutions, it was stressed that FAO's unique role in nutrition consists in the fact that FAO is the principal UN agency with expertise in improving nutrition outcomes via food and agriculture-based approaches. The FAO mandate covers all aspects of food supply – production, processing, storage, distribution and all food systems – plant and animal food, fishery and aquaculture, but also land tenure, water management, forestry, environment and natural resources protection and safeguarding for future generation – all with important implications for nutrition and food supply. FAO programmes complement UN partner agencies' actions who are working in nutrition from the health, care, food assistance and gender perspectives (WHO, UNICEF, WFP, respectively). It was introduced the concept of sustainable diets, recently developed by FAO Nutrition and Consumer Protection Division, AGNDA.

Concerning the FAO-NCDNCEE cooperation over the five year period, it was mentioned that FAO was supportive to the NCDNCEE development by coorganizing and hosting in the premises of the Regional Office in Budapest, REU the first two meetings of the Network. REU is providing continuous support for the maintenance of the NCDN website, which is hosted on the FAO technical platform and provides regular training to the technical staff. It is hoped that the further link of the NCDN network to the ESCORENA one through the Agroweb platform would contribute to the evidence based considerations for narrowing the nutrition gap and enlarging the channels of dissemination of the NCDNCEE knowledge and expertise.

In the conclusion part, Dupouy mentioned that NCDNCEE is a key facilitator in scaling-up nutrition in the Central and Eastern Europe region, having a feature of a unique knowledge network in Nutrition in the region with a series of essential initiatives, such as the assessment of the Capacity development needs in nutrition in the region, curriculum development needs in nutrition, provision of capacity development activities, training, initiation of research and the contribution to the formation of young generation of leaders in nutrition. It was concluded also that the NCDNCEE should be invited at the FAO/WHO regional meetings and consultations on the preparation of the ICN+20 (International Conference on Nutrition, 20 years after) in order to facilitate its connection to governmental officials in agriculture and health, working towards raising its status to an inter-governmental organization.

Internet-based communication support for UNU/SCN Network for CD in Nutrition

By Marija Ranic, IMR, University of Belgrade, Belgrade, Serbia, and Michal Demes, FAO Regional Office for Europe and Central Asia, Budapest, Hungary.

The aim of this presentation was to present the development of UNU/SCN NCDNCEE communication support development (incl. website: http://www.agrowebcee.net/ncdn), as well as to introduce with AgroWeb Network and ESCORENA "Network of networks" environments, and to introduce the common CMS environment set up at FAO in Rome - Typo3 Content

Management System. AgroWeb international network (www.agrowebcee.net) has been established by organizations and individuals involved in agricultural and rural development in Central and Eastern Europe (CEE). Participants started to develop a collaborative network, in view of the lack of information on the Internet about agricultural topics in the region in 1998. Established in 1974 by FAO and European research institutions, the European System of Cooperative Research Networks in Agriculture (ESCORENA, http://www.escorena.net/) became an umbrella for cooperation between research institutions focused on food, agriculture and related fields. Since its foundation, ESCORENA has expanded to include 17 networks, including UNU/SCN NCDN CEE. In 2009 with the financial support of FAO REU and technical support of FAO HQ, a new server was set up in Rome to serve as common technical background for the AgroWeb CEE Network, ESCORENA and the Thematic Knowledge Networks operational in the framework of ESCORENA in the region. The new web server is based on the Typo3 Content Management System, aiming to contribute to the streamlining of the agricultural information and knowledge sharing services (common look and feel, technical support, easy navigation and maintenance).

The introduction of EuroFir AISBL: An international food information provider

By Paul Finglas, Institute for Food Research, Norwich, 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.

What did NCDNCEE achieve in FCDB activities in collaboration with EuroFIR NoE (2006-2011)

By Mirjana Gurinovic, Maria Glibetic, IMR, University of Belgrade

The European Food Information Resource (EuroFIR) Network of Excellence

(NoE) aims to develop and integrate food composition data throughout Europe. To achieve this goal, CD in food and nutrition is essential. EuroFIR joined forces in CD with the United Nations (UN) University/UN System Standing Committee on Nutrition, the Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDN-CEE) and established collaboration from 2006. During the 2nd, 3rd, 4th and 5th meetings of the NCDNCEE the EC project NoE EuroFIR was introduced to participants and collaboration and partnerships established (agendas and reports available at the website:

http://www.srbnutrition.info/?page=Network.

What was achieved?

- Contacts were established between the EuroFIR NoE and non-EuroFIR
 countries from the targeted regions (CEE and MENANA), and an
 agreement was made to assess existing FCDBs and also to organise CD
 activities for countries outside EuroFIR. As a first step, a detailed
 investigation into existing FCDBs, their status and information about
 organisations and capacities conducting food composition activities was
 carried out.
- Training needs were identified and information obtained on the professional capacity background of the countries. Based on the assessment, specialised training programmes, courses, individual training and workshops were developed and implemented to support CD, initiation or progress in national FCDB or food table production.
- Dissemination and information about the training opportunities to non-EuroFIR countries in CEE and MENANA with EuroFIR support
- The EuroFIR training programme consists of individual activities, supported by exchange grants, and tailor-made courses and workshops that are offered to participants. Since 2007, these opportunities have been available to members of the EuroFIR NoE and, to a limited extent, to partners from officially recognised compiler institutions who were not members of the EuroFIR network. CD networks were recognised as important tools for the future development of FCDBs in Central and Eastern European (CEE) countries.
- Following EuroFIR engagement, many professionals from non-EuroFIR countries attended a Euro-FIR Food Composition Course on Production and Use of Food Composition Data in Nutrition. A web application Food Comp Data Management (FCDM) for the creation of new FCDBs has been presented at training sessions and has proved to be a useful training tool for the initiation of new FCDB creation and development under EuroFIR criteria.
- The results from this collaboration, were presented at international meetings and papers published in international journals.

Conclusion: Collaboration between EuroFIR and other networks provides an excellent opportunity for capacity development in FCDB creation. Training needs

in non-EuroFIR countries in food and nutrition have been identified and many participated at EuroFIR workshops and meetings. CD networks can be useful tools in addressing needs in various countries, streamlining regional involvement and collaboration, and can increase capacity to address food, health and nutritional challenges, including FCDB development.

Development of Regional Food Composition Data Base of BalkanFood platform with EuroFIR-Nexus & NCDNCEE

By Maria Glibetic, Agnes Kadvan, Mirjana Gurinovic, IMR, University of Belgrade, Serbia, Paul Finglas, Institute for Food Research, UK.

EC FP7 project EuroFIR-Nexus "The EuroFIR Food Platform: Further integration, refinement and exploitation for its long-term self-sustainability" objective is to further integrate/refine the EuroFIR Food Platform (EFP), to improve/support the ways research is undertaken into relationships between food, diets and health in Europe. More information on EuroFIR-Nexus can be found at http://www.eurofir.org.

The Work Package (WP 4) Training and spreading of excellence within EuroFIR-Nexus project has as its main objectives to promote knowledge and skills development in food composition research within the network and across Europe through training and education activities. One of the tasks of the WP 4 is "Task 4 – Shaping and implementing BalkanFood platform with UNU Network for Capacity Development in Central & Eastern European Countries."

UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE, www.agrowebcee.net) together with FP7 EuroFIR-Nexus project took challenge to develop the first regional FCDB for Balkan Region. As the first step of the activities in the development of the Regional Food Composition Data Base (FCDB) is inventory about the existing FCDB in the region. During the 6th NCDNCEE meeting and the EuroFIR-Nexus & NCDNCEE -Workshop the FCDB status of each country was presented. Software Food Comp Data Management (FCDM) program, a web based application for the creation of a new national/regional Food Composition Data Base (FCDBs) was developed and network members were trained in FCDB creation during NCDNCEE meetings. This software will be used in further work on the development of Regional Food Composition Data Base of BalkanFood platform with EuroFIR-Nexus & NCDNCEE. IMR provided during workshop to all members free of charge the Software Food Comp Data Management (FCDM) for the Regional or National Food Composition Data Base creation, including the Manual for use; the basic FCDB from Serbia in the software where all other countries will contribute with their own FCDB and training and technical support will be provided to all members from the programmer and staffs from IMR for FCDB. With each country representative from West Balkan countries (Albania, Bulgaria, Bosnia and Herzegovina, Croatia, Republic of Macedonia, Moldova, Hungary, Slovenia. Serbia). Memorandum Montenearo. Romania. Understanding (MoU), a document describing a bilateral or multilateral agreement between parties will be signed with EuroFIR-Nexus.

A Capacity Development activity

Workshop: Regional Food Composition Data Base. A FCDM software application in BalkanFood Platform development

By Agnes Kadvan, Marija Dj. Ivankovic IMR, University of Belgrade.

The aim was to present possibilities and advantages of IMR developed web based software Food Comp Data Management (FCDM) and initiate participants to add foods to a regional FCDB in Balkan countries using FCDM which is in accordance with EuroFIR technical annex. During the workshop presentation of FCDM Web based software and practical exercise with participants were on the agenda.

The FCDM web based software is created as a simple tool easily applicable for the creation of new FCDB through some training and/or workshops. Since few of the countries in our region has an electronic version of FCDB and they need one in every day work, this was step forward to help them to contribute in a creation of Regional FCDB based on EuroFIR recommendations. The Regional FCDB is on national and English language with is great advantage. This also enabled participants' communication and data interchange with different EuroFIR member databases. Recipe calculation, part in the FCDM web based software, develops also according to EuroFIR recommendations would be additional advantage. It will allowed creation of regional recipe data base. This is a logical continuance of the process of forming regional FCDB based on EuroFIR principles. Main topic discussed was those related with properly acquiring data and correctly filling in the values in data base. During the practical exercise participants entered 3 new foods in a Regional FCDB and after few minutes they found new foods online using search by name facility in a Regional FCDB. The detailed instruction "how to use FCDM software" was created for this workshop on English language. After the course participant completed the questionnaire.

Application of Food Comp Data Management (FCDM) software for the creation of regional Food Composition Data Base (FCDB)

By Agnes Kadavan, Marija Djekic Ivankovic, Mirjana Gurinovic, Maria Glibetic IMR, University of Belgrade.

Food Comp Data Management (FCDM) software is a form of research tool for capacity development in food and nutrition. FCDM as a web based application for food composition database (FCDB) creation has been produced by the research team of the Institute for Medical Research in Belgrade, Serbia. In this web based software, that was also used for development of Serbian FCDB, basic entity is food. Every food has information on names, component values, other identifiers and physical properties, standard food classifications and general food description (coded with Langual thesaurus). Related entities are recipes with all ingredients and retention factors, as well as sample information.

The need for regional FCDB in Balkan region countries was identified and the use of this web application in creating FCDB could provide a quality data harmonized with proposed EuroFIR guidelines. This would enable good

communication and easy data interchange between different Balkan countries as well as EuroFIR members.

This web application of FCDM software can be a useful training tool for capacity development in FCDB creation on national and /or regional level and can promote knowledge, skills development and vision in food composition research, training and education.

Additional future activities

E-learning modules available for interested persons from CEE countries

Fre Pepping, the Graduate School VLAG, Wageningen University, the Netherlands.

During the 6th meeting of the NCDNCEE meeting it was concluded that a summary was needed of the e-learning modules available at present via the various EU-funded p[projects that the NCDN CEE network has a linkage with.

Such a summary would enable the members of the network to identify in their own institution/country the appropriate people that might find these e-leaning modules useful (either to increase their own knowledge or to use it for teaching purposes). This memo information is about the modules available and the way to access them. The modules have been made by several EU-funded projects since 2004. In principle the modules should be available free of charge if access is requested in the appropriate way and if reference is made that the use falls within the scope of the activities of the NCDN CEE network (this obviously excludes commercial activities).

The EuroFIR: Within EuroFIR the module on "Nutrient Analysis for Nonchemists" has been developed and the following four topics or cases were elaborated: (1) Fats and Fatty Acids; (2) Proteins and Amino Acids: (3) Carbohydrates and Fiber; and (4) Elements. This module, developed by Dr. Cora Brusstra is available at the EuroFIR website: www.eurofir.net. In case you want to have more information please contact paul.finglas@BBSRC.AC.UK.

As from April, 1st 2011 EuroFIR has turned into a new project EuroFIR NEXUS under FP7. A module on Vitamins will be developed during EuroFIR NEXUS and will be ready as from March 2013 onwards.

The EURRECA (EURopean micronutrient RECommendations Aligned) Network of Excellence aims to advance methodology for setting micronutrient requirements and recommendations, and to identify vulnerable groups regarding micronutrient intake and status. In the network several training materials consisting of interactive exercises and associated information together with theoretical background information have been/are being developed. The modules are titled: (1) Reproducibility and validation studies within nutritional research; (2) Nutrient requirements and recommendations; (3) Study designs and assessment of validity.

The first module has been finalized and a free demo is currently available on the website. http://www.eurreca.org/everyone/7764/5/0/32. The other two e-modules

will be ready in the beginning of 2012. The conditions for full access to the elearning modules for non-EURRECA partners will be set by the end of 2011. For up to date information, please consult the EURRECA website or contact Adrienne.cavelaars@wur.nl.

The NuGO: Four modules have been prepared within the framework of the Network of Excellence European Nutrigenomics Organisation; linking genomics, nutrition and health research. Partners actively involved in making the e-modules were; JUMC (Poland), Univ. of Lund (Sweden), Wageningen University (Netherlands), Technical Univ. Munich (Germany), Univ. of Oslo (Norway) and Univ. of Ulster (UK). Access can be obtained via www.nugo.org and then go to the e-learning folder. The tutor is Dr. Elgin Lichtenauer (elgin.lichtenauer@wur.nl). Four modules exist, and they are titled: (1) Molecular nutrition and genomics; (2) Polymorphisms and responsiveness to diet; (3) Proteomics; (4) Nuclear receptors.

Annex 1. Agenda of the meeting

Venue: Belgrade, **Hotel Balkan** (http://www.balkanhotel.net/en/home.aspx)

Date of arrival: 24th or 25th May early morning. Check in at the hotel.

May 24, 20.00 h: Welcome dinner at the hotel

1st day 25 May 2011

Morning: 09.00-12.00

- > Welcoming address
- ➤ Gordana Jovcic, IMR, director, University of Belgrade, Serbia,
- > Opening: Purpose and agenda of the meeting, introduction of participants
 Arne Oshaug, Akershus University College, Norway
- Assessment of CD activities:
 - Briefly reviewing the years behind what were the key activities?
 Presentation of the NCDNCEE main results and achievement from 2006-2011

Mirjana Gurinovic Network chair, Maria Glibetic, IMR, University of Belgrade, Serbia, Arne Oshaug, Akershus University College, Norway, Fre Pepping VLAG Wageningen, The Netherlands

> Presentation of CD activities in countries where collaboration with NCDNCEE

Participants: Igor Spiroski NIPH, Republic of Macedonia; Aida Hadziomeragic, IPH, Bosnia and Hercegovina; Zvonimir Satalic, Lab. Nutr Science, Croatia; Tagli Pitsi, NIHD, Estonia, Mojca Korošec, Biotechnical Faculty, Slovenia. Chair, Arne Oshauq

Coffee/Tea Break 10.30-11.00

- Micronutrient recommendations and adequacy assessment through Network activities 2007-2011
 - How was NCDNCEE –EURRECA NoE cooperation? The results of EURRECA and Network activities

Mirjana Gurinovic, Romana Novakovic, Maria Glibetic, IMR, University of Belgrade

- ➤ EURRECA "Nutri-RecQuest" web-based tool on current micronutrient recommendations, Agnes Kadvan, Mirjana Gurinovic, IMR, University of Belgrade
- Micronutrients intake/status adequacy assessment in CEE countries

 Romana Novakovic, Danijela Ristic Medic, Marina Nikolic, Mirjana Gurinovic, IMR, University of Belgrade, Serbia and participants from CEE

Lunch 12.00-13.30

Afternoon session 13.30-18.00

- Assessment of Capacity Development within Nutrition education and Network activities in 2006-2011
 - Topics covered in Network activities

Arne Oshaug, Akershus University College, Norway, Mirjana Gurinovic, IMR, University of Belgrade, Serbia

Identified new training and nutrition education needs of the CEE area. Comparing with the Networks framework

Zvonimir Satalic, Lab. Nutr Science, Croatia; Romana Novakovic, Marina Nikolic, Mirjana Gurinovic, IMR, University of Belgrade, Serbia, Arne Oshaug, Akershus University College, Norway

- Introduction of FAO Regional Food and Nutrition meeting with participation of UNU/SCN NCDNCEE (Budapest, September/October 2011)
 - Improving nutrition: what approaches and priorities for an effective intersectoral action?

Eleonora Dupouy, FAO Regional Office for Europe and Central Asia (REU), Budapest, Hungary

- Suggestions for possible Network future activities
 - Internet-based communication support for UNU/SCN Network for Capacity Development in Nutrition (and other Thematic Knowledge Networks)

Maria Ranic, IMR, University of Belgrade, Serbia, Michal Demes*a, FAO Regional Office for Europe and Central Asia (REU), Budapest, Hungary

> Initiative to publish monograph of Network activities

Maria Glibetic, Mirjana Gurinovic, IMR, University of Belgrade, Serbia, Arne Oshaug, Akershus University College, Norway, and all other participants

Introduction and the role of Centre of research excellence in nutrition in future capacity development activities

Maria Glibetic, Chair, IMR, University of Belgrade, Serbia

Joint dinner and social event 19:00

23

^a Online presentation via Skype.

2nd day 26 May 2011

♣ Food Composition Data Base (FCDB) Development through NCDNCEE activities 2006-2011 and future activities: partnership with EuroFIR NoE & EuroFIR AISBL

Morning 09.00-12.00

Key results from EuroFIR NoE and introduction of EuroFIR AISBL, Paul Finglas, Institute for Food Research, UK

What did NCDNCEE achieve in FCDB activities (2006-11), Mirjana Gurinovic, Maria Glibetic, IMR, University of Belgrade

Country presentations: FCDB situation and achievements. Participants: Mojca Korošec, Biotechnical Faculty, Slovenia; Igor Spiroski, NIPH, R. of Macedonia; Aida Hadziomeragic, IPH, Bosnia and Hercegovina; Zvonimir Satalic, Lab. Nutr Science, Croatia; Olga Gutium, Technical University of Moldova; Ivana Joksimović, IPH, Montenegro; Eralda Mariani, MoH, Albania; Desyslava Gyirova, NCPHP, Bulgaria; Camelia Parvan, NPHI Romania; Marija Dj. Ivankovic, IMR Serbia

Coffee/Tea Break 10.30-11.00

> EuroFIR- Nexus project presentation

Paul Finglas, Institute for Food Research, UK

Development of Regional Food Composition Data Base of BalkanFood platform with EuroFIR-Nexus & NCDNCEE

Maria Glibetic, Mirjana Gurinovic, IMR, University of Belgrade, Serbia, Paul Finglas, Institute for Food Research, UK

Lunch 12.00-13.00

Afternoon session 13.00-16.00

Workshop: Regional Food Composition Data Base: Web based Food Comp Data Management (FCDM) software application in BalkanFood Platform development

Agnes Kadvan, Marija Dj. Ivankovic IMR, University of Belgrade + participants

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

Paul Finglas, Institute for Food Research, UK

> Conclusions and agreement on future FCDB activities

Mirjana Gurinovic & Maria Glibetic, IMR, University of Belgrade, Serbia, Arne Oshaug, Akershus University College, Norway, Paul Finglas, Institute for Food Research, UK and all other participants.