UNICEF ECARO and FAO-REU side event:
Networking the Regional Food and Nutrition Capacity Development Networks:
Lessons Learned, Knowledge Sharing and Opportunities to Establish a Nutrition
Partnership and Platform in Central Asia and Caucasus

Mirjana Gurinovic

SHARING THE LESSONS LEARNED AND ACHIEVEMENTS BY THE
CAPACITY DEVELOPMENT NETWORK IN NUTRITION IN CENTRAL
AND EASTERN EUROPE, CAPNUTRA

Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical
Research, University of Belgrade, Serbia, CAPNUTRA Chair

Outline

1. The definition of the Capacity Development (CD)
   - Background-history UNU/SCN NCDNCEE/CAPNUTRA
   - Frameworks for CD based on needs in CEE countries
   - Collaboration with FAOREU & EC & EFSA projects & WHO & Networks
   - What was achieved in this area

Network members from food and nutrition research/public health nutrition institutions: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Former Yugoslav Republic of Macedonia, Moldavia, Montenegro, Poland, Romania, Slovakia, Slovenia, Serbia and facilitators came from the Netherlands, Norway and UK.
Capacity Development (CD): A definition

CD in food and nutrition is more than formal training: includes also human resource development, organizational, institutional and legal framework development with aim of enhancing knowledge and skills (Lopes, Theisohn, 2003).

CD is a long term, continuing process, which gives primacy to national priorities, policies, plans and processes.


Background-history UNU/SCN NCDNCEE - CAPNUTRA

- Regional SCN networks already existed in Asia, Latin America, the Middle East and Southern Africa
- Thus the network in Central and Eastern Europe is the newest network facilitated by the UNU Food and Nutrition Programme, through SCN
- **Kick-off meeting** for a capacity development initiative in nutrition in Eastern and Central Europe, **19 May 2005** FAO-SEUR office, Budapest, Hungary
- The inaugural meeting of the **UNU/SCN Network for CD in nutrition for Central and Eastern Europe (NCDN-CEE)** took place in Budapest on the **13-14 February 2006**, at the FAO SEUR Office
- Established to initiate and support food and nutrition CD activities in research and training in CEE countries based on country/region specific needs.
- **NCDNCEE’s follow-up from 2012 is CAPNUTRA**
Kick-off meeting for a capacity development initiative in nutrition in Eastern and Central Europe, 19 May 2005 FAO-SEUR office, Budapest, Hungary

1st inaugural meeting of the NCDNCEE
16 participants from 10 countries supported by UNU

2nd Meeting of the NCDNCEE. 16th -17th November 2006. Budapest, Hungary FAO-SEUR office. 18 participants from 9 CEE countries supported by UNU and EuroFIR
Objectives

The main objective was to stimulate CD in food and nutrition in CEE through identifying research infrastructure (RI) status and needs, specific education/training needs, and to establish networking with European countries through collaboration with international networks and international research projects.

- NCDNCEE/CAPNUTRA works toward the enhancement of individual, institutional and organizational capacity in food and nutrition research, including identification of the challenges and needs, development of strategies, frameworks and planning guidelines for CD in nutrition in CEE and Balkan countries (BC).

Framework for analyzing actors and responsibilities in nutrition in CEE

<table>
<thead>
<tr>
<th>Levels</th>
<th>Actors</th>
<th>Main responsibility</th>
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<tbody>
<tr>
<td>1</td>
<td>Governmental: Primarily MoH, and MoA, MoT(E), MoST, MoE, MoWSA, MoLD. Policy makers/civil servants, Parliament, local level authorities</td>
<td>Policy development (food security, nutrition, health, training), decision making, legislation for protecting and supporting the human right to adequate food, National plans of actions, Funding, Monitoring and evaluation</td>
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<td>2</td>
<td>Institutional: Health and research institutions (including statistical), clinics (medical doctors, public health specialists, dietitians, nurses, food controllers), agriculture extension, hygiene</td>
<td>Implement policies, Providing expertise and advisory function, Evidence based/research in nutrition, Maintain and develop staff’s capacity, Adapt strategies to local needs, Monitoring and evaluation, Provide feedback to ministries, International collaboration/networking</td>
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<td>3</td>
<td>Educational: Universities, faculties, scientific academies, institutions/departments, scientists, researchers, professors, primary and secondary, school teachers, kindergarten personnel, catering staff</td>
<td>Implement policies on education, Provide and support staff development, Base education/training on local needs, Evaluate education/training, Provide feedback to ministries, Engage in international collaboration, Publishing education material</td>
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<tr>
<td>4</td>
<td>Community: Farmers, cooperatives, industry/business Mass media (public and private) NGO’s, professional associations Families, individuals</td>
<td>Production of safe healthy foods, responsible marketing, Promotion of healthy nutrition, Positive role models in healthy eating patterns and lifestyle, Making informed choices, Promotion of consumers’ rights, Availability of desirable food at acceptable prices, Compliances to legislation</td>
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Framework for capacity development in nutrition in CEE


Needs

<table>
<thead>
<tr>
<th>Level</th>
<th>Prioritized Strategies/activities</th>
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| 1. Governmental | • Political commitment  
| | • Food and nutrition policies  
| | • Develop nutritional action plan  
| | • Reinforcing scientific evidence for increased awareness  
| | • Strengthen capacity building  
| | • Support for capacity development |
| 2. Institutional | • Adequate human resources (including knowledge)  
| | • Most recent equipment, methodology and relevant standards  
| | • Adequate facilities and organizational structure  
| | • Transforming national policies to needs of various groups  
| | • Updated/approximation of legislation on food and nutrition  
| 3. Educational | • Adequate institutional capacity (human resources)  
| | • Research equipment, apply recognized methodologies and standards  
| | • Adequate facilities and organizational structures  
| | • Take account of relevant national policies  
| | • Updated/approximation of legislation on food and nutrition  
| | • Establish academic institution for nutrition training  
| | • Develop curricula at each level of education  
| | • Accreditation and certification of higher training activities  
| | • Conformity of catering served to nutrition demands  
| 4. Community | • Scientific based information for food selection  
| | • Food based dietary guidelines  
| | • Sustainable and adequate food supply  
| | • Information for informed individual choice for diets (use of labeling)  
| | • Application of legislation for food labeling  

Challenges/Problem areas

<table>
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<tr>
<th>Levels</th>
<th>Prioritized Strategies/activities</th>
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</table>
| 1. Governmental | • Lobby for political support for needs of nutrition policy and national action plan  
| | • Lobby for funding of national/capacity development  
| | • Monitor for government accountability  
| | • Information/education of politicians/parliamentarians  
| | • Requesting increased communication between line ministries  
| 2. Institutional | • Terms of reference/job description - updates  
| | • Promote staff development by academic education and training in nutrition/health (incl. in-service)  
| | • Monitoring dietary intake/nutritional health status  
| | • Exchange of experience (national/international)  
| | • Communication and dissemination of scientific results on nutritional health  
| | • Establishing and using food database (software)  
| 3. Educational | • Harmonization/approximation of EU requirements in the educational system according to the Bologna Process  
| | • Preparing nutrition training and education material  
| | • Establish training courses for professionals with international collaboration  
| | • Promote/update a web-based food and nutrition network  
| | • Disseminate research results to users  
| | • Research to support FNAP  
| | • Develop food database  
| 4. Community | • Nutrition promotion and education  
| | • Collaborate with industry/business on responsible marketing  
| | • Specific programmes targeting certain population groups  
| | • Contribute articles on nutrition to media  

For all: Fund raising/networking/communication material

Duration

- Short term
- Medium/long term
- Continuous
Activities for the UNU/SCN NCDNCEE – CAPNUTRA 2006-2017

Identify status, needs and follow-up activities within food, health and nutritional challenges in order to facilitate the initiatives of the Network in CD in the CEE region;

• Identify strategic elements to meet the capacity development plans of institutions and individuals in the region;

• Identify status & gaps in food and nutrition research infrastructure (RI) , needs and gaps in nutritional knowledge and priority specific trainings;

• Organize Network meetings, specific capacity development activities such as workshops, trainings; seminars and other education related to the food and nutrition based on identified situation and needs in countries /region with support from EC projects, FAO, WHO and other relevant stakeholders;

• Disseminate scientific achievements, experiences and international co-operation and communication between scientific institutions, individual scientists and stakeholders in order to accelerate implementation of innovations, knowledge exchange and technology transfer;

• Collaborate on information exchange with other national /European and international networks/ associations/institutions;

• Foster regional involvement and identify needs and opportunities in regional CD: Current status in academic nutrition education in CEE countries needs improvement-Solution: to organize trainings based on identified needs with support from EU level;

• Create, test and implement nutritional tools for food composition data base development, dietary intake assessment using harmonized and standardized methods according to European recommendations; Capacity development in dietary intake survey - harmonization with EU: Menu methodology regional training for DIET ASSESS & PLAN (DAP) platform
EC projects:

• EuroFIR (FP6) - European Food Information Resource Network (NoE) FP6 www.eurofir.net 2006-2010
• EURRECCA (FP6) - Harmonising nutrient recommendations across Europe with special focus on vulnerable groups and consumer understanding (NoE) FP6 www.eurreca.org 2007-2012
• EuroFir –Nexus (FP7)- EuroFir Food Platform: further integration, refinement and exploitation for its long-term self-sustainability FP7 www.eurofir.org 2011-2013
• CHANCE (FP7)- Low Cost technologies and traditional ingredients for the production of Affordable, Nutritionally correct, Convenient foods enhancing health in population groups at risk of poverty (http://www.chancefood.eu/) 2011-2014
• ODIN (FP7) - Food-based solutions for Optimal vitamin D Nutrition and health through the life cycle www.odin-vitd.eu 2013-2017
• Euro DISH- (FP7) ”Study on the need for food and health research infrastructures in Europe”, http://www.eurodish.eu 2012-2015
• BACCHUS (FP7) - Beneficial effects of dietary bioactive peptides and polyphenols on CVD health in humans. www.bacchus-fp7.eu/ 2012-2016

EFSA projects:

• “Updated food composition database for nutrient intake” 2012
• Dietary Monitoring Tools for Risk Assessment” 2012-2013
• Support to National Dietary Surveys in Compliance with the EU Menu methodology “The children’s survey”, including subjects from three months up to 9 years old, 2017-2021
• Support to National Dietary Surveys in Compliance with the EU Menu methodology “The adults’ survey”, including subjects from 10 to 74 years old, 2017-2021

UN organisations:

• UNU, Food and Nutrition Programme for Human and Social Development (UNU-FNP)-Standing Committee of Nutrition (SCN)
• FAOREU-FAO Regional Office for Europe and Central Asia, Budapest, Hungary
• WHO-World Health Organisation, Regional Office for Europe, Copenhagen, Denmark

Networks:

• CEECFOODS- Central and Eastern European Countries Food Data Systems
• MENANA-Middle East and North Africa Capacity Building Initiative

European food and nutrition research and public health nutrition institutions
Adequate research infrastructures (RIs) in food, nutrition, and health domain are essential for nutrition epidemiology, innovative nutritional research, dietary exposure and food safety risk assessment and effective public health nutrition (PHN) strategies to address the diet-related diseases, malnutrition and foodborne diseases. (Gurinović 2016)

- Research infrastructure (RI) provides a platform for interdisciplinary/multi-national collaboration to facilitate world-class research (EC, 2013)
- Research Infrastructures, including the associated human resources, covers major equipment or sets of instruments, in addition to knowledge-containing resources such as collections, archives and data banks. (ESFRI, 2010).
  a) Hard research infrastructures; major buildings, equipment and instruments, knowledge-containing resources (e.g. e-platforms and data banks).
  b) Soft research infrastructures; unique data management, interpretation and handling capacities, harmonization of data and procedures, training staff, professional networks and knowledge transfer.


DIET ASSESS & PLAN (DAP)

A platform for standardized and harmonized food consumption collection, comprehensive dietary intake assessment and nutrition planning

DAP platform consists of the following:
- DAP software, Food Composition Data Base Management (FCDM) web application, Serbian FCDB, Balkan food platform with Regional FCDB & link to EuroFIR 30 FCDBs and nutrient recommendation datasets


Currently running in EFSA project - Support to National Dietary Surveys in Compliance with the EU Menu methodology (sixth support) - DAP implementation

“Adults’ survey”, including subjects from 10 to 74 years old, 2017-2021 (Serbia, Bosnia and Herzegovina and Montenegro)

“The children’s survey”, including subjects from three months up to 9 years old, 2017-2021 (Serbia and ‘Former Yugoslav Republic of Macedonia’ (FYROM))
Example topics:
- CD activities/training/education in CEE 2006-2017
- WHO Growth standards and its use
- Human Rights to Adequate Food and World Food Day activities
- FCDB status and training needs inventory questionnaire
  - Training in production and Use of Food Composition Data Base (FCDB) in Nutrition (EuroFIR)
  - WHO European Action Plan for Food and Nutrition Policy
  - Evidence-based nutrition - From Requirements to Recommendations and Policies (EURRECA)
  - Capacity Development Workshop on identification of nutrition data from Grey literature in CEE
  - Micronutrient recommendations collection and adequacy assessment in CEE from grey literature
  - Language- Food indexing training in Food composition creation (EuroFIR)
  - Assessment of current situation in higher nutrition education and training needs in the CEE
  - Media communication training
  - How to write proposals for the EC projects
  - Nutritional tools presentation and usage
  - Development of regional FCDB for West Balkan (EuroFIR-Nexus)
  - Dietary intake surveys- dietary intake methods & adequacy assessment
  - Food consumption collection and dietary intake survey harmonization with EU Menu methodology

workshop "Training and Capacity Building for non EuroFIR CEE Countries"
Belgrade, Serbia, June 2007

Regional Workshop for Food Composition Data Base Development;
19 participants from CEE 5 countries NCDNCEE
Belgrade, Serbia June 11th 2010
EURRECA Course Evidence-based nutrition: Warsaw – Sep 9-14, 2008; 4 participants from NCDNCEE
2nd EURRECA week, Budva, Montenegro 9-13 Dec 2008, 5 members from NCDNCEE with EURRECA support

Group work

4th UNU/SCN NCDNCEE.
Belgrade, 10-12 November 2008

5th Meeting UNU/SCN NCDNCEE.
Belgrade, 11-12 November 2009

EURRECA GREY LITERATURE WORKSHOP 2008.

Questionnaire on user friendly Web-based computerized software design tool

6th Meeting of the UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE), Belgrade, 25th-26th May, 2011
(32 participants from 15 CEE countries)

Memorandum of Understanding (MoU) was signed with 11 CEE and Balkan countries, forming Balkan food platform: Croatia (2 institutions); Cyprus; FB&H; Republic of Macedonia; Moldova; Montenegro; Russia; Slovenia, Ukraine & EuroFIR AISBL, Serbia-IMR, CAPNUTRA
Turning dilemmas into opportunities: a UNU/SCN capacity development network in public nutrition in Central and Eastern Europe

Original Article

Capacity development in food composition database management and nutritional research and education in Central and Eastern European, Middle Eastern and North African countries

APPENDIX

Nutri-RecQuest: a web-based search engine on current micronutrient recommendations

APPENDIX

EURRECA nutritional planning and dietary assessment software tool: NutPlan

Micronutrient intake and status in Central and Eastern Europe compared with other European countries, results from the EURRECA network
Publications in Journals

SUSTAINABLE FOOD SYSTEMS FOR HEALTHY DIETS IN EUROPE AND CENTRAL ASIA

Food Chemistry

Improving nutrition surveillance and public health research in Central and Eastern Europe/Turkish Countries using the Balkan Food Platform and dietary tools

Food Chemistry

Development, Features and Application of DIET ASSESS & PLAN (DAP) software in supporting public health nutrition research in Central Eastern European Countries (CEE)

Status in academic nutrition education in Central and Eastern Europe (CEE)

Study in Nutrition
U-undergraduate
G-graduate
P-postgraduate

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.

From 2012 CAPNUTRA

**Capacity development (CD) process from 2005-2017 in CEE/Balkan - summary**

**2017**
- Forming the NCDNCEE 2005
  - Establishing the contacts
  - Kick off meeting 2005
  - Identification of the challenges and needs, development of strategies, frameworks and planning guidelines for CD in food and nutrition

**NCDNCEE /CAPNUTRA meetings, workshops from 2006-2017**
- Education, training, dissemination

**Collaboration with EC projects:**
- EuroFIR (2006-2012)
- EU-RECA (2007-2012)
- EuroFIR-Nexus (2011-2013)
- others

**Collaboration with UN org:**
- FAO REU
- UNU-FNP-SCN
- WHO

**Dissemination:**
- website
- research papers
- International/national conferences
- video films

**Identification of the status and development of the food and nutritional research infrastructure (RI) and training needs in CEE / Balkan**

- Questionnaires about:
  - FCDB status
  - FCDB management software tools
  - Training needs in food nutrition
  - Academic nutrition education

- Inventory on FCDB status and related training needs in CEE/BC identified lack of harmonized and standardized FCDBs and dietary tools.

- Micronutrient recommendations collection
- Dietary intake methods
- Nutritional studies data collection from CEE - grey literature

**Nutritional research tools development:**
- FCDM web application
- NutriRecQuest
- Balkan Food Platform
- Web application grey lit. data collection
- DIET ASSES&PLAN (DAP)

**Forming the CAPNUTRA 2012**
- For Network sustainability and to be active partner in future EC projects in dissemination and knowledge transfer to CEE partners

**HAROMIZATION OF THE FOOD AND NUTRITIONAL RESEARCH IN CEE/BALKAN:**

- Creation of the 1st online Serbian FCDB harmonized with EuroFIR criteria
- Balkan Food platform-Regional FCDB using FCDM management software
- MoU with 11 CEE countries
- Identified priority training needs in FCDB and dietary intake harmonization for future CD in CEE
- Developed Nutritional tools for food consumption collection and dietary intake assessment
- Implementation of the harmonization in nutritional research in CEE /Balkan to strengthen research activities across Europe.

**DAP implemented in EFSA project-Support to National Dietary Surveys in Compliance with the EU Menu methodology (sixth support):**
- “The adults’ survey”, including subjects from 10 to 74 years old, 2017-2021 (Serbia, Bosnia and Herzegovina and Montenegro) and “The children’s survey”, including subjects from three months up to 9 years old, 2017-2021 (Serbia and ‘Former Yugoslav Republic of Macedonia’ (FYROM).
Network meetings: 9; Total 200 participants
http://www.agrowebcee.net/ncdn/events/
• Workshops/trainings/courses: 26 in total
• International meetings: 42; 73 presentations
• Other meetings: 5; 8 presentations
• Research papers in scientific journals: 11
• Food and nutritional tools - 5
• Website: http://www.agrowebcee.net/ncdn/: www.capnutra.org

> Video film: http://www.youtube.com/watch?v=OGAaVs3po-c

Conclusions

The network was a source of new scientific knowledge in nutrition, a tool to foster regional involvement and identify needs and opportunities in regional CD

✓ During the last decade, impressive food and nutrition CD results were achieved in the field of PHN research in CEE/BC.

✓ Improved RI in CEE/BC region with standardized and harmonized methodology /tools in dietary surveys will contribute to compiling the EFSA comprehensive European Food Consumption Database applicable in chemical exposure assessment and to FAO/WHO GIFT global database platform, containing individual quantitative food consumption data.
Conclusions II

- Cooperation with other European networks and active participation in international research projects enhanced nutritional training, exchange of information and knowledge transfer and brought about development of substantial capacity in food, nutrition and public health research in CEE/BC.
- Nowadays, CAPNUTRA network is a platform that fosters regional involvement and further developments in PHN research.

Acknowledgements

- UNU, Food and Nutrition Programme for Human and Social Development (UNU-FNP), Capacity Building Working Group of the United Nation’s Standing Committee on Nutrition (SCN)
- FAOREU-FAO Regional Office for Europe and Central Asia, Budapest, Hungary
- EuroFIR NoE (FP6)- European Food Information Resource Network (www.eurofir.net)
- EURRECA (FP6)- Harmonising nutrient recommendations across Europe with special focus on vulnerable groups and consumer understanding (www.eureca.org)
- EuroFIR Nexus (FP7)- EuroFIR Food Platform: Further integration, refinement and exploitation for its long-term self-sustainability (www.eurofir.org)
- EFSA projects-“Updated food composition database for nutrient intake”&Dietary monitoring tools for risk assessment” ; ” Support to National Dietary Surveys in Compliance with the EU Menu methodology—children and adults survey ”
- CHANCE (FP7)- Low Cost technologies and traditional ingredients for the production of Affordable, Nutritionally correct, Convenient foods enhancing health in population groups at risk of poverty (www.chancefood.eu)
- ODIN (FP7)- Food-based solutions for Optimal vitamin D Nutrition and health through the life cycle (www.odin-vtd.eu)
- CAPNUTRA-Capacity Development Network in Nutrition in Central and Eastern Europe- www.capnutra.org
Thank you for your attention!

Mirjana Gurinović MD PhD Nutrition Research advisor  
Centre of Research Excellence in Nutrition and Metabolism  
Institute for Medical Research, University of Belgrade, Serbia  
www.srbnutrition.info  
Capacity Development Network in Nutrition in Central and Eastern Europe, CAPNUTRA, Serbia  
www.capnutra.org  
e-mail: mirjana.gurinovic@gmail.com