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**Report on the
Regional Workshop for Food Composition Data Base
Development**

Belgrade, June 11th 2010

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Introduction

The Venue was at the Hotel Royal (<http://www.hotelroyal.rs/>) in Belgrade. The programme can be seen in Annex 1. The meeting was organized by UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE) with support from Institute for Medical Research, University of Belgrade (IMR). The meeting was hosted by the IMR planned and run by Drs. Mirjana Gurinovic and Maria Glibetic IMR, University of Belgrade, together with the staff of IMR. At this Network meeting there were 19 participants from 5 countries (Annex 2).

At the opening the participants were welcomed by Dr Glibetic. She also presented the purpose and agenda of the meeting, and the participants were introduced guided by Dr. Gurinovic.

Background

The European Food Information Resource Network (EuroFIR, Network of Excellence) aims to develop and integrate food composition data through Europe including CEE countries. EuroFIR, joined forces with the NCDNCEE with the support from the United Nations University/UN System Standing Committee on Nutrition. Inventories on food composition data base status and on capacity development needs were initiated by EuroFIR. An inventory of Food Composition Database Status (FCDB) and training needs in CEE Countries in Europe and in non-EuroFIR Countries showed great potential and needs for capacity development in this area. Especially in West Balkan Countries (WBC) the lack of software and tools for data base management were identified.

Objective of the workshop

The aim 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. The agenda also included a presentation of the Web tool and practical exercise with participants.



Regional Workshop for FCDB Development - activities

General introduction and presentation of Food composition data base

Food composition databases (FCDBs) are resources providing detailed information on the nutrient composition of foods. The primary goal of EuroFIR and EuroFIR AISBL is the development, popularization and exploitation of food composition data and accompanying information in order to support and underpin research into food quality, food safety, and diet and health in Europe.

During the presentation M. Djekic-Ivankovic informed participants about:

- EuroFIR Food Composition Databases (FCDB) organization; common standards for the identification and description of foods in European FCDBs;
- food description system - LanguaL (Lingua Alimentaria or language of food) as international controlled vocabulary for systematic food description;
- how food composition data are compiled; and
- what are the advantages and purpose of Regional FCDB.

She also emphasized that IMR objective was to develop an electronic and online food composition database according to EuroFIR recommendations which allows database linking and management and comparability between FCDBs.

Presentation of the software for Regional Food Composition Data Base creation

During the workshop the software was presented by A. Kadvan. This software represents a tool for capacity development aimed at those working in creation of databases on food composition. Software for construction of food composition database (FCDB) has been created by the research team of the Institute for Medical Research in Belgrade, Serbia.

This web application was also used for development of Serbian FCDB. Every food has information on names, component values, other identifiers and physical properties, standard food classifications and general food description (coded with LanguaL thesauri). Related entities are recipes with all ingredients and retention factors, as well as sample information.

There is a need for national/regional FCDB in the Balkan region countries, and the use of this web application in creating FCDB could provide quality data harmonised with the proposed EuroFIR guidelines. This could enable good communication and easy data interchange between data bases of different Balkan countries as well as between EuroFIR members.

This web application can be a useful training tool for capacity development in FCDB creation on national or regional level; furthermore it can promote knowledge and skills, stimulate to development and vision in food composition research, training and

education.

Workshop -Inserting a new food item

For the Regional Workshop for FCDB Development A. Kadvan prepared special designed, step by step, instructions for “SOFTWARE FOR REGIONAL FOOD COMPOSITION DATA BASE CREATION” (Annex 3), with detailed information how to use the software, how to create and insert new food items, what the key characteristics are, etc. All participants received this document in Serbian language.

M. Djekic-Ivankovic started practical work with the software and gave examples, such as on inserting new food items. Example of a “new food” was “Knjaz Milos” sparkling water (Fig 1) and information from the bottle label was used to give a content description for the database. Throughout the example, the course instructor explained software layout and the key characteristics as following:

- Basic entity of the foods in the database, and information on names and/or other identifiers, Standard Food Classifications and general food description (coded with Langual thesauri);
- Related entities - Recipes and Sample information;
- FOOD and its own Components (micronutrients and macronutrients) with Method Specification, Acquisition type, Quality Assessment and Reference;
- Vocabularies (thesauri) created and standardized by EuroFIR for thesaurus language.

Participants had many questions during this session. That discussion raised many interesting ideas and suggestions.



Fig 1



Practical work with the programme, inserting data from different countries

For this exercise participants were divided into 5 groups. Each group chose foods from their own country to be inserted into a regional FCDB. Participants used Instructions for “SOFTWARE FOR REGIONALFOOD COMPOSITION DATA BASE CREATION” and they successfully inserted selected foods with photo and all relevant information (Annex 4). This included:

- General data (food name and identifiers);
- Physical and other properties of food;
- Values - Micronutrient content with all relevant information (value, method, reference).

Short review of inserted items the workshop for each group is listed below. They were:

- Vegetable cream soup with 5 micronutrients (Bosnia and Herzegovina; Food Code 3558);
- Milk, fortified “effect” with 11 micronutrients (Croatia; Food Code 3559);
- Sunflower seeds, peeled, dried with 4 micronutrients (Macedonia; Food Code 3557);
- Tomato row, with 8 micronutrients (Slovenia; Food code 3550).

The participants worked on their chosen foods, whilst the tutors circulated among them and answered questions from the participants. Each group had many questions during the session, which were discussed by everybody.

Some of the questions and comments that need to be clarified were:

- Since the food industry represents potential valuable source of extensive and good quality analytical food composition data, even dating years in the past, the potential effective approaches were discussed how to present the aim of the initiative to the food industry representatives where as the main benefit for the industry would be providing nutrition data of their products for the interested consumers and other interested parties;
- actions regarding getting insight into current situation in every country were discussed (is there existing database, are there plans for establishing new database, etc.) and relevant institutions were identified;
- there is a need for appropriately naming the regional database. The name should be informative and should emphasize its regional character;
- technical details on completing the database were discussed, like proving keyboard option for often used commands (e.g., Edit), ensuring that software remembers previous information for the same item when moving to the next nutrient, etc.

Most of these comments came from the Croatian team.

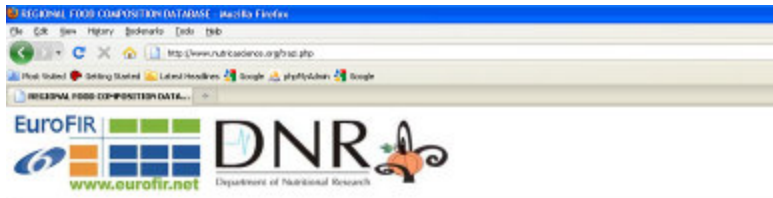
Practical training – how to use the on-line web database

The training explained how the entered data (by compilers) are accessible for a wide range of end-users on the Internet. The entered data are accessible from the following web address: www.nutricascience.org.

Several search options are available to find the foods and detail information for every single food item. 'Examples given were:

- Search based on alphabetical order – list all foods starts with the selected letter;
- search based on food groups – list all foods belongs to selected food group (milk & products, egg & products, meat & products, seafood, fat & oil, vegetable, fruit,... etc);
- search based on nutrition values – list all foods contain the selected micronutrient (in descending order based on micronutrient contain);
- search based on food name / part of food name / bar code – list the matching food items based on entered string;
- search based on regions – list the food items belonging to the selected region - country (Bosnia, Croatia, Macedonia, Serbia and Slovenia).

After the web site presentation participants individually check the search options on the web and also the new food items entered during the previous practical part of the workshop (Annex 4).





Workshop summary, conclusions and plans for future activities

The participants agreed to collaborate within the UNU-SCN Network for Capacity Development in Nutrition in Central and Eastern Europe - NCDNCEE on the following:

Development of the Regional Food Composition data base (FCDB) for the Balkan countries.

Contribute to the Regional FCDB development using the software presented in the training session. During the workshop they received a USB memory stick with the programme and manual for the users, with the appropriate user name and password.

The entered data for the Regional FCDB should be accessible on the following web address: www.nutricascience.org, and it will be hosted by IMR/NCDNCEE.

Participants proposed to develop the possibility of the software to export and import the data which are already in electronic version in some countries (this has been done after workshop).

Future plan of the activities in some countries are the following in the next period were specified as follows:

- Croatia will contribute with the electronic version of the FCDB on excel format for the import of data to the software (this is done after workshop) and they will also collect the data from the food industry;
- Macedonia is using the same FCDB (published in Croatia) and they will collect also data from industry for the mineral water and baby formula;
- Slovenia have lot of analytical data for meat and meat products published in a book and those data will be part of the Regional FCDB; they will also collect data from the industry;
- Bosnia and Herzegovina will collect data from industry;
- all participants agreed to work and enter the data in the software and IMR programmer will be responsible for technical support;
- a memorandum of understanding (MoU) will be signed by all participants in order to facilitate collaboration and data base management; the text of the MoU is presented to all participants as soon as it is ready;
- the next meeting of the NCDNCEE is planned in March in 2011 when the Regional FCDB will be on the agenda (with presentation of the achieved results) on the 6th meeting of the UNU/SCN Network for capacity development in nutrition in CEE.



Useful publications on the subject

- Pavlovic M, Pepping F, Michal D, Biro L, Szaboles P, Dimitrovska Z et al (2009)(a): Turning Dilemmas into opportunities: A UNU/SCN Capacity Development Network in Public Nutrition in Central and Eastern Europe. Public Health Nutr. 12 (8) 1046-1051.
- Pavlovic M, Witthoft C M, Hollman P, Hulshof P, Glibetic M, Porubska J et al (2009) (b): Training and Capacity Building in Central and Eastern Europe through the EuroFIR and CEE networks, Food Chem.113, 846-850.
- Glibetic M, Kadvan A, Tepsic J, Debeljak Martacic J, Djekic-Ivankovic M and Gurinovic M. : Web application for the creation of Food Composition Data Base harmonized with EuroFIR criteria in Balkan countries, Journal of Food Composition and Analysis 2010 (In press)
- Mirjana Gurinovic, Maria Glibetic, Romana Novakovic, Maria Ranic, Maria Djekic Ivankovic and Arne Oshaug (2009): A Report from the 5th Meeting of the UNU/SCN Network for Capacity Development in Nutrition in Central and Eastern Europe (NCDNCEE), 11th -12th November, Belgrade.
<http://www.srbnutrition.info/?page=Network>
- Mirjana Gurinovic, Cornelia M Witthoft, Jasna Tepsic, Marija Ranic, Paul JM Hulshof, Peter Hollman, Janka Porubska, Azza Gohar,á Jasmina Debeljak Martacic, Gordana Petrovic-Oggiano, Romana Novakovic, Maria Glibetic, Arne Oshaug, Capacity development in food composition databases and nutritional research and education in Central and Eastern Europe, Middle East and North African countries, EJCN 2010 (in press)
- Agnes Kadvan, Marija Djekic Ivankovic, Jasmina Debeljak Martacic, Marija Ranic, Maria Glibetic, Mirjana Gurinovic, EuroFIR D1.8.42-Report on training workshop for WB/CEEC and recommendations for future use by AISBL, 2010
- Becker, W, Møller, A, Ireland, J, Roe, M, Unwin, I, Pakkala, H. (2008). Proposal for structure and detail of a EuroFIR standard on food composition data II: Technical Annex. Danish Food Information.EuroFIR Technical Annex (2008): Page: External
[linkhttp://www.eurofir.eu/sites/default/files/Deliverables/D1.8.19.pdf](http://www.eurofir.eu/sites/default/files/Deliverables/D1.8.19.pdf) (last accessed 25 May 2010)



Annex 1. Agenda of the meeting

Venue: Hotel Royal, Belgrade

The time included in the agenda was indicative since there were changes according to progress. The time for lunch was 13:00 to 14:00 hours and there was a coffee/tea break in the morning.

Regional Workshop for Food Composition Data Base Development

Venue: Belgrade, **Hotel to be announced**

Date of arrival: 10th June 2010. Check in at the hotel.

June 10th, 20.00 h: Welcome dinner

The time included in the agenda is indicative since there may be changes according to progress.

June 11th

- **09.00 -9.10 Welcoming address**

Marija Glibetic, IMR, University of Belgrade

- **9.10 – 9.20 Opening: Purpose and agenda of the meeting, introduction of participants.**

Mirjana Gurinovic, IMR, University of Belgrade

- **9.20-9.40 General introduction and presentation of Food composition data base**

Marija Glibetic, Mirjana Gurinovic, Agnes Kadvan, Jasmina Debeljak Martacic i

Marija Djekic Ivankovic, IMR, University of Belgrade

- **9.40-11.00 Presentation of the software for Regional Food Composition Data Base creation**

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Agnes Kadvan, Marija Djekic-Ivankovic & Jasmina Debeljak Martacic, IMR,
University of Belgrade

- ✓ **Main parts of the software** –*Introduction, technical details, data structure of the framework, entity specifications, standard vocabularies*
- ✓ *data collection, data extraction and data storage*

11.00-11.20 Coffee break

➤ 11.20-13.00 Workshop

Inserting a new food item - *all steps necessary from literature (or lab) data to FCDB data*

Relevant for all participants: Please bring few examples of nutritive values for foods with macro/ micronutrients information to be inserted into FCDB including the sources of information (publications, label, analytical data, etc.)

13.00-14.00 Lunch

Workshop continue

- **14.00-15.40 Practical work with the programme, inserting data from different countries**

15.40-16.00 Coffee break

- **15.40-17.15 Practical training – how to use the on-line web database**

Agnes Kadvan, IMR, University of Belgrade

- **17.15-17.40 Workshop summary and plans for future activities**

Maria Glibetic, Mirjana Gurinovic, IMR, University of Belgrade

- **17.40-18.00 Conclusions and feedback from participants**

Annex 2. Participant list

Regional Workshop for Food Composition Data Base Development; Belgrade, June 11th 2010

Country	Name	Institution
Bosnia and Herzegovina	Aida Hadziomeragic	Institute of Public Health of Federation of Bosnia and Herzegovina, Sarajevo
Croatia	Irena Keser	Laboratory for Nutrition Science, Faculty of Food Technology and Biotechnology, Zagreb
Croatia	Zvonimir Satalic	Laboratory for Nutrition Science, Faculty of Food Technology and Biotechnology, Zagreb
Macedonia	Igor Spiroski	Republic Institute for Health Protection, Skopje
Macedonia	Zlatanka Dimitrovska	Republic Institute for Health Protection, Skopje
Slovenia	Marinka Jan	Department of Food Science and Technology, Biotechnical Faculty, Ljubljana
Slovenia	Mojca Korošec	Department of Food Science and Technology, Biotechnical Faculty, Ljubljana
IMR Team		
Serbia	Mirjana Gurinovic	Institute for Medical Research Department for Nutrition and Metabolism Tadeusa Kosciuskog 1 Belgrade 11000 www.srbnutrition.info

Serbia	Marija Glibetic	Institute for Medical Research Department for Nutrition and Metabolism University of Belgrade Tadeusa Kosciuskog 1 Belgrade 11000 www.srbnutrition.info
Serbia	Jasna Tepsic	Institute for Medical Research Department for Nutrition and Metabolism University of Belgrade Dr. Subotica 4 POB102 Belgrade 11000 www.srbnutrition.info
Serbia	Tamara Popovic	Institute for Medical Research Department for Nutrition and Metabolism University of Belgrade Dr. Subotica 4 POB102 Belgrade 11000 www.srbnutrition.info
Serbia	Romana Novakovic	Institute for Medical Research Department for Nutrition and Metabolism University of Belgrade Dr. Subotica 4 POB102 Belgrade 11000 www.srbnutrition.info
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Serbia	Agnes Kadvan Ivica Stancic	Institute for Medical Research Department for Nutrition and Metabolism University of Belgrade Dr. Subotica 4 POB102 Belgrade 11000 www.srbnutrition.info
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Serbia	Marina Nikolic	Institute for Medical Research Department for Nutrition and Metabolism University of Belgrade Dr. Subotica 4 POB102 Belgrade 11000 www.srbnutrition.info
Serbia	Vesna Vucic	Institute for Medical Research Department for Nutrition and Metabolism University of Belgrade Dr. Subotica 4 POB102 Belgrade 11000 www.srbnutrition.info



Annex 3. Software for regional food composition data base creation



SOFTWARE FOR REGIONAL FOOD COMPOSITION DATA BASE CREATION

Manual for users on Serbian language

Prepared by Agnes Kadvan



Sadržaj:

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INSTALACIJA

Instalaciona verzija programa se nalazi na USB memoriji koja je istovremeno i zaštitni ključ za program. Za instalaciju je potrebno je pokrenuti instalacionu verziju programa sa USB-a (install.exe) i pratiti instrukcije. Nakon instalacije, tokom operativnog rada sa programom USB memorija stalno mora da bude priključen uz računar.

TEHNIČKA KONFIGURACIJA

Da bi program mogao neometano da radi preporučena minimalna tehnička konfiguracija računara je sledeća:

- Pentium 4 ili slična konfiguracija
- Windows operativni sistem (XP, Vista, Windows 9x...)
- Stalna Internet konekcija



O PROGRAMU

Program omogućava kreiranje, održavanje i ažuriranje regionalne baze podataka namirnica (FoodCompositionDataBase).

Sama baza podataka, kao i web sajt za pretraživanje podataka se nalazi na Internet serveru (www.nutricascience.org), a program daje pristup tim podacima.

Korisnici programa su odgovorni za sadržaj podataka koje oni unose u bazu.

Za pristup programu neophodna je korisničko ime i lozinka.

Korisničko ime i lozinku svakom korisniku dodeljuje sistem administrator baze podataka.

Struktura baze podataka je formirana na osnovu preporuka EuroFIR-a.

EuroFIR - je (European Food Information Resource) je projekat u trajanju od 5 godina. Network of Excellence funded by the European Commission's Research Directorate General under the "Food Quality and Safety Priority" of the Sixth Framework Programme for Research and Technological Development. U ovom projektu učestvuje 49 partnera sa raznih naučnih univerziteta, istraživačkih institucija, predstavnici industrije kao i mala i srednja preduzeća iz 27 Evropskih zemalja.

Misija EuroFIR-a je harmonizacija i standardizacija rada na tablicama sastava namirnica u Evropi. A krajnji cilj projekta je razvoj banke podataka pod platformom EuroFIR-a uz uslov da svaka baza podataka bude koncipirana i prikazana na standardizovan način.

Da bi se to postiglo, EuroFIR je odredio i propisao osnovna pravila koje treba primeniti:

- Indeksiranje namirnica pomoću LanguaL-a
- Dokumentovanje svih parametara pomoću EuroFIR klasifikacije koja sadrži sve definicije osnovnih komponenata i opis analitičkih metoda
- Standardne procedure za sastavljanje receptura gotovih jela sa retencionim faktorima
- Sistem sa evaluaciju kvaliteta podataka

Standard koji se primenjuje je tehnička specifikacija svih parametara -technical annex.

Technical annex se nalazi na web adresi <http://www.eurofir.eu/sites/default/files/Deliverables/D1.8.19.pdf>

U njemu su data pravila koja opisuju strukturu podataka tablice sastava i on sadrži sledeće stavke :

- Identifikaciju, opis, klasifikaciju i etiketiranje namirnica
- Merljive vrednosti parametara, proračunate ili izračunate nutritivne vrednosti mikro i makronutrienata u namirnicama
- Specifikaciju metoda koje su upotrebljene za dobijanje tih vrednosti
- Reference (izvor podataka) za sve parametre

Naš program je koncipiran na osnovu tehničkih standarda EuroFIR-a i sadrži sva uputstva kako bi obezbedio kreiranje online baze podataka namirnica za naš region koja odgovara EuroFIR-ovoj banci podataka.

Glavni entiteti (jedinice) programa su sledeće:

- **NAMIRNICA** - Osnovni entitet baze podataka, koja ima svoje jedinstvene/osnovne attribute (informacije) koje ga determinišu (naziv i ostali opisni determinanti), kao i standardnu klasifikaciju po LanguaL-u (Standard Food Classifications and general food description -coded with LanguaL *thesauri*).

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- Povezani entitet je **RECEPTURA GOTOVOG JELA** (koja sadži sve potrebne namirnice)
- **PARAMETRI** - Svaka namirnica sadži **parametre** (mikro i makronutrijente) a svaki parametar se definiše sa sledećim atributima:
 - **Specifikacija metode** (abbreviation for official method, analytical key steps and laboratory performance)
 - **Vrednost** (selected value, statistical parameters, mean, median, min, max, etc)
 - **Acquisition type** that gives categories for the origin of a value.
 - **Quality Assessment**, an important component because scores for quality categories represent the global Quality index (confidence Code) for each value.
 - **Reference**, containing relevant bibliographical information about component parameters (title, authors, publication date, type of reference, etc)
- **Sample** – sampling procedure information.

Statični deo baze podataka čine šifarnici (thesauri) - definisani i standardizovani od strane EuroFIR-a. Ovi šifarnici sadrže standarde za:

Thesaurus language, Acquisition type, Reference Type, Units, Matrix Units, Value Types, Method Types and Method Indicators, Component and Component Groups.

Ovi standardizovani šifarnici omogućuju komunikaciju i razmenu podataka između pojedinih baza podataka namirnica zemalja članica EuroFIR projekta.

STANDARDNE KOMANDE ZA RAD SA PROGRAMOM:

Rad sa programom se odvija uz pomoć miša i tastera. Većina ekrana daje tabelarni prikaz podataka.

Na ekranu na komandnim dugmadima je uvek označena funkcija svake komande. Sa klikom na komandu se aktivira tražena komanda. Ako se radi o tabelarnom prikazu podataka, pre aktiviranja komande uvek je potrebno označiti željenu stavku u tabeli na koju se odnosi komanda. Stavka je označena, ako se u tabeli pred njim nalazi mali crni trougao.

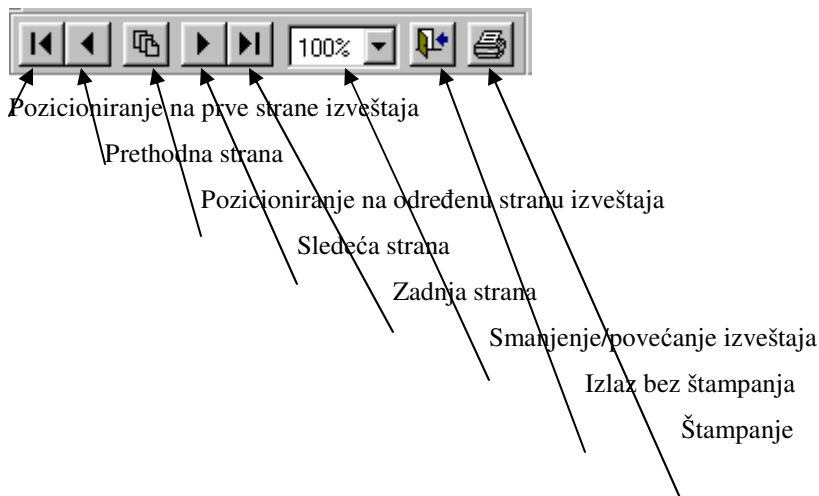
Rad sa tabelama:

Tasteri levo,desno,gore,dole, PageUp,PageDown služe sa kretanje unutar tabele.

Sa duplim klikom na zaglavlja pojedinih kolona (npr. šifra namirnice, naziv namirnice, itd) podaci se sortiraju po abc-om redosledu sadržaja te kolone. Kucanjem početnih slova u odgovarajućim kolonama tabele, program automatski sortira i pozicionira se na traženu stavku.

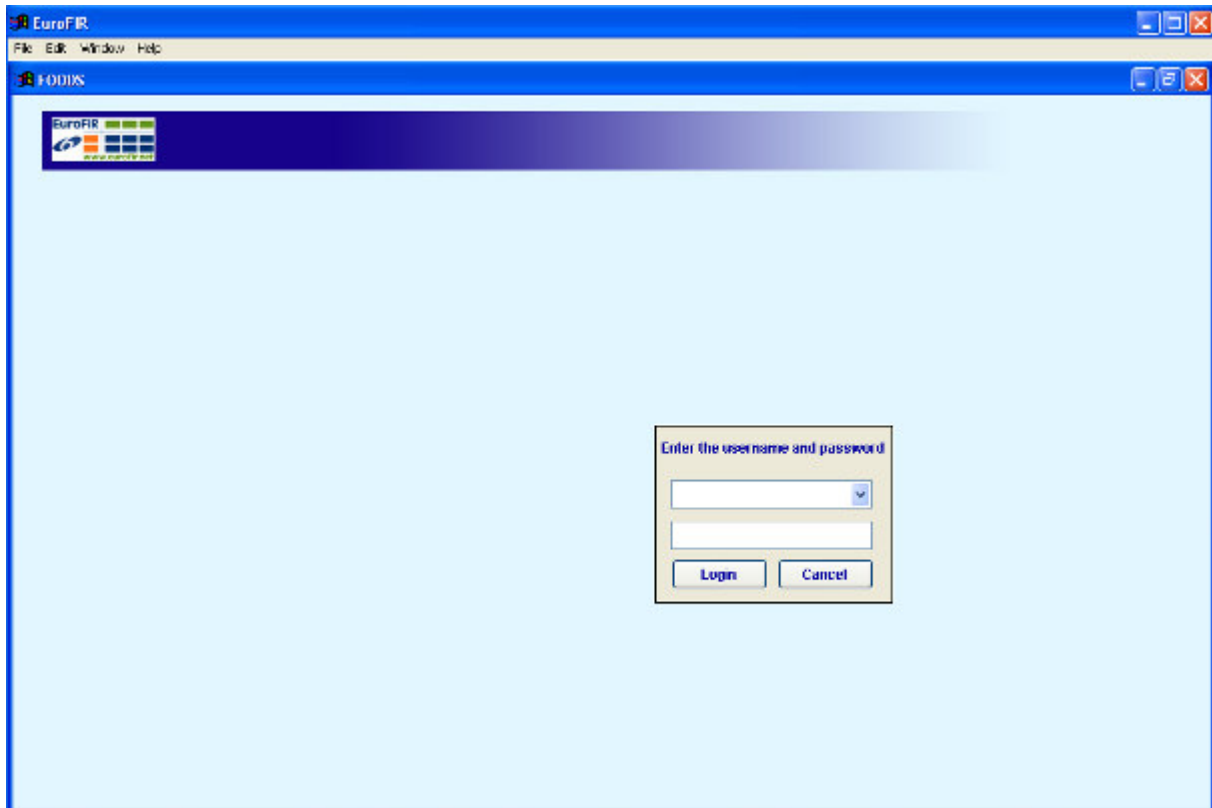
Štampanje izveštaja –

svaki izveštaj se prvo pojavi na ekranu. Ako izveštaj ima više strana sa naznačenim komandama je moguće listati po stranama kao i odštampati izveštaj.



RAD SA PROGRAMOM

Prvi korak je prijava korisnika. Svaki korisnik poseduje korisničko ime i lozinku koji su neophodni za pristup programu, kao i USB ključ bez kojeg program nije moguće startovati. Tokom rada sa programom pored svake promene u bazi se evidentira ime korisnika i datum kada je nastala promena. Prava korisnika su limitirana. Korisnici imaju pravo na pregled svih podataka koje se nalaze u bazi, a mogu menjati podatke vezane samo za te namirnice koje pripadaju njihovoj državi.



Slika 1 - prijava korisnika

CODE	NAME	NAME (ENGLISH)	FOOD GROUP	PIECE WEIGHT	BAR CODE
0018	Baklje oijastosi sum	Almonds, blanched, dried	FRUIT OR FRUIT PRODUCT	100.0000	
0049	Bambani vocni	Fruit candy	SUGAR OR SUGAR PRODUCT	100.0000	
0051	Heljino brasno	Buckwheat flour, whole-grain	GRAIN OR GRAIN PRODUCT	100.0000	
0147	Dzem	Jam	SUGAR OR SUGAR PRODUCT	100.0000	
0250	Jabuka cela	Apple, whole, raw	FRUIT OR FRUIT PRODUCT	90.0000	
0257	Jabuka-mesnati deo	Apple, flesh, raw	FRUIT OR FRUIT PRODUCT	77.0000	
0280	Jaje kufosija-zumanca	Egg yolk, raw, fresh	EGG OR EGG PRODUCT	100.0000	
0298	Jetrens pastaša	Pate, liver, canned	MEAT OR MEAT PRODUCT	100.0000	
0314	Kakao u prahu, nezasećen	Cocoa powder, no sugar added	BEVERAGE (NON-MILK)	100.0000	
0328	Kafa instant	Coffee, instant	BEVERAGE (NON-MILK)	100.0000	
0354	Kikiriki, sirov, mesoljeni	Peanut, raw, without salt	NUIT, SEED OR KERNEL PRODUCT	89.0000	
0357	Kim, suve semenke	Caraway seeds, dried	MISCELLANEOUS FOOD PRODUCT	100.0000	
0418	Kompot od sljiva sa koricicom	Compote, plum, whole fruit skin	FRUIT OR FRUIT PRODUCT	90.0000	
0422	Konjak	Cognac	BEVERAGE (NON-MILK)	100.0000	
0495	Kukuruzne pahuljice, karfičaks	Cornflakes	GRAIN OR GRAIN PRODUCT	100.0000	
0508	Kvasac pekarski, svaz	Yeast, baker's, raw	MISCELLANEOUS FOOD PRODUCT	100.0000	
0518	Liker	Liquor	BEVERAGE (NON-MILK)	100.0000	
0532	Lesnik sum	Hazelnut, dried	FRUIT OR FRUIT PRODUCT	50.0000	
0540	Lubenica, mesnati deo	Watermelon, flesh, raw	FRUIT OR FRUIT PRODUCT	50.0000	

Slika 2. – Baza namirnica

Nakon inicijalizacije programa (prijave korisnika) je dostupan ekran sa tabelarnim prikazom podataka baze namirnica. Ova tabela sadrži sve namirnice koje se nalaze u bazi, sa prikazom generalnih informacija o namirnicama (sifra, naziv, engleski naziv, grupa namirnice, pojedinačna težina, barkod, zemlja porekla, poreklo /biljno-životinjsko/, slika namirnice, itd)

Ispod table su komande:

INSERT – otvara formu za unos nove namirnice

EDIT – otvara formu za pregled podataka postojeće namirnice

DELETE – opcija za brisanje namirnice

PRINT – opcija za štampanje liste svih namirnica

STANDARD VOCABULARIES – otvara formu za pristup EuroFIR standardima

SEARCH – opcija za pretraživanje na osnovu dela naziva namirnica

DATA STATISTICS – statistički izveštaji o unetim podacima

DATA BACKUP – opcija za arhiviranje podataka

Podaci vezani za namirnicu u skladu sa EuroFIR technical annex-om (<http://www.eurofir.eu/sites/default/files/Deliverables/D1.8.19.pdf>) se dele u sledeće grupe (detaljno objasnjenje svih podataka je dato u technical annex-u)

1. **FOOD NAME AND IDENTIFIERS** – generalni podaci namirnice
2. **STANDARD AND GENERAL FOOD DESCRIPTION** – kodirani podaci u skladu sa Languag thesaurijem
3. **PHYSICAL AND OTHER PROPERTIES OF THE FOOD** – sadrži dodatne informacije o namirnici – tipična veličina porcije, boja, proizvođač, distributer, itd
4. **VALUES** – sadrži parametre (mikro i makronutrijente) sa samim vrednostima, metodama, referencama i retention faktorima.
5. **SAMPLE** – informacije o uzorkovanju namirnice
6. **QUALITY ASSESSMENT** – podaci vezani za kvalitet parametara

The screenshot shows the EuroFIR software interface. At the top, there are logos for Capacity Development in Nutrition, DNR (Department of Nutritional Research), and the University of Belgrade Institute for Medical Research. The main window is titled 'EuroFIR' and 'PROPERTIES OF THE FOOD ENTITY'. The 'FOOD NAME AND IDENTIFIERS' tab is active, showing a form with the following fields: FOOD CODE (0018), ORIGINAL FOOD NAME (Badem oljušteni suvi), ENGLISH FOOD NAME (Almonds, blanched, dried), and Country (Serbia). Below these are tabs for 'STANDARD AND GENERAL FOOD DESCRIPTION', 'PHYSICAL AND OTHER PROPERTIES OF FOOD', 'VALUES', 'SAMPLE', and 'QUALITY ASSESSMENT'. The 'SCIENTIFIC FOOD NAME' field is empty. The 'FOOD GROUP' is set to 'FRUIT OR FRUIT PRODUCT' with a sub-code of '09'. Other fields include 'CODIX FOOD STANDARDS', 'MEASUREMENT' (kg), 'ORIGIN (A - animal, V - vegetable, N - none)' (V), 'ARTICLE NUMBER (bar code)', 'E - NUMBER', and 'INS CODE'. There is also a checkbox for 'IS THE FOOD RECIPE' and a 'RECIPE CALCULATION' button. A photograph of almonds is shown in a central window.

Slika 3. – FOOD NAME AND IDENTIFIERS

- **FOOD NAME AND IDENTIFIERS** – sadrži generalne podatke o namirnici (detaljno objasnjenje svih podataka je dato u technical annex-u)
 1. Original food name – obavezno je uneti
 2. English food name – obavezno je uneti
 3. Scientific food name – nije obavezno uneti
 4. Food group - obavezno uneti – moguće grupe namirnica su definisane EuroFIR standardom
 5. Measurement – merna jedinica – nije obavezno uneti
 6. Origin – poreklo namirnice – obavezno uneti
 7. Article number – bar code (<http://www.gs1.org/productssolutions/barcodes/>) – nije obavezno uneti
 8. E – number – nije obavezno uneti
 9. Ins code – nije obavezno uneti

Slika 4. Recipe calculation

RECIPE CALCULATION – pomoću ove opcije je moguće sastaviti recepture gotovih jela. Kod sastavljanja recepture procenat kala (yield factor) za vodu, masti i alkohol se definiše na nivou gotovog jela dok posebno za svaku namirnicu koje čine gotovo jelo se definišu šifre i naziv namirnice, potrebne količina, merne jedinice kao i metode pripreme (termička obrada) (slika 5).

Po EuroFIR standardima sastavni elementi recepture gotovog jela mogu da budu i namirnice koje nisu registrovane u bazi namirnica, zato vrednosti za makro i mikro nutrijente se ne računaju automatski kalkulativnom metodom na osnovu namirnica koje čine recepturu.

EuroFIR
File Edit Window Help

RECIPE CALCULATION

EuroFIR FOOD CODE 0689 ORIGINAL FOOD NAME Paradajz,kecap
Country: Serbia ENGLISH FOOD NAME Tomato,ketchup EXIT

RECIPE INGREDIENTS

GENERAL COOKING METHOD BOILED

No	RECIPE ID	FOOD ID	INGREDIENT NAME	(gr) AMOUNT OF INGREDIENT / 100 gr	UNIT (gr)	RANK	REMARKS
1	00002	1070	Salt, table	0.5000	g	0	
2	00002	2956	Paprika, red, ground	2.0000	gr	0	
3	00002	1622	Ajvar	5.0000	g	0	
4	00002	0692	Tomato juice (10%)	100.0000	g	0	

COOKING METHOD FOR: Salt, table

No.	COOKING METHOD
1	BOILED

INSERT NEW INGREDIENT DELETE INGREDIENT PRINT

INSERT ADDITIONAL COOKING METHOD DELETE COOKING METHOD

Slika 5. Sastavljanje recepture gotovog jela

EuroFIR
File Edit Window Help

PROPERTIES OF THE FOOD ENTITY

EuroFIR FOOD CODE 0018 ORIGINAL FOOD NAME Badem oštusteni suvi Country: Serbia
ENGLISH FOOD NAME Almonds, blanched, dried EXIT

FOOD NAME AND IDENTIFIERS STANDARD AND GENERAL FOOD DESCRIPTION PHYSICAL AND OTHER PROPERTIES OF FOOD VALUES SAMPLE QUALITY ASSESSMENT

STANDARD FOOD CLASSIFICATION	CODE	DESCRIPTION	NOTE
Product type, CODEX Food Categorization Syst	ADB23	NUT, SEED OR KERNEL	EFG group 13. Eurocode-2 groups 7.38-40 and 7.70. Nuts, seeds an
Food source	B1272	ALMOND	-SCFAM-Rosaceae00<SCNAM>Amygdalus communis L. (BASIS
Part of Plant or Animal	CD132	SEED OR KERNEL, SKIN REMOVED, GERM PRESENT	
Physical State Shape or Form	ED150	WHOLE, NATURAL SHAPE	
Extent of Heat Treatment	FD118	PARTIALLY HEAT-TREATED	
Cooking Method	G0003	COOKING METHOD NOT APPLICABLE	
Treatment Applied	HD138	WATER REMOVED	
Preservation Method	JD116	DEHYDRATED OR DRIED	
Packing Medium	KD003	NO PACKING MEDIUM USED	
Container or Wrapping	ND001	CONTAINER OR WRAPPING NOT KNOWN	
Food Contact Surface	ND001	FOOD CONTACT SURFACE NOT KNOWN	
Consumer Dietary use or Label	PD024	HUMAN FOOD, NO AGE SPECIFICATION	Food produced and marketed for human use without any restrictio

EDIT LANGUAGE CODES

Slika 6. – Standard and general food description

Forma **STANDARD AND GENERAL FOOD DESCRIPTION** je pregled Languag thesauri kodova namirnice. Po EuroFIR standardima za svaku namirnicu je potrebno dodeliti Languag kodove (unapred

Report: Regional Workshop for Food Composition Data Base Development, Belgrade, June 11th 2010

definisani atributa) koje tačno određuju, opišu namirnicu (product, type, food source, origin, physical state, heat treatment, cooking method, treatment, preservation, packing, itd...). Postoji poseban program za kodiranje po LanguaL thesauri kodovima (razvijen u sklopu EuroFIR projekta) ali je moguće i u sklopu ovog programa dodeliti languaL kodove (slika 7).

CODE	STANDARD FOOD CLASSIFICATION	DESCRIPTION	NOTE
A0823	Product type, CODEX Food Categorization	NUT, SEED OR KERNEL	EFG group 13. Eurocode-2 groups 2
B1272	Food source	ALMOND	<SCIFAM>Rosaceae<<SCINAM>
C0132	Part of Plant or Animal	SEED OR KERNEL, SKIN REMOVED	
E0150	Physical State Shape or Form	WHOLE, NATURAL SHAPE	
F0018	Extent of Heat Treatment	PARTIALLY HEAT-TREATED	
G0003	Cooking Method	COOKING METHOD NOT APPLICAE	
H0138	Treatment Applied	WATER REMOVED	
J0116	Preservation Method	DEHYDRATED OR DRIED	
K0003	Packing Medium	NO PACKING MEDIUM USED	
M0001	Container or Wrapping	CONTAINER OR WRAPPING NOT K	
N0001	Food Contact Surface	FOOD CONTACT SURFACE NOT KN	
P0024	Consumer/Dietary use or Label	HUMAN FOOD, NO AGE SPECIFICA	Food produced and marketed for h

Slika 7. Dodela LanguaL thesauri kodova

[LanguaL](http://www.langual.org) – je međunarodni sistem za opis kodiranja namirnica - izabran od strane EuroFIR-a (LanguaLimentaria or language of food), an international controlled vocabulary for systematic food description (www.langual.org)

The screenshot shows the EuroFIR software interface. At the top, there are logos for Capacity Development in Nutrition, DNR (Department of Nutritional Research), and the University of Belgrade Institute for Medical Research. The main window title is 'EuroFIR' and the menu bar includes 'File', 'Edit', 'Window', and 'Help'. The current screen is titled 'PROPERTIES OF THE FOOD ENTITY'. Below this, there are input fields for 'FOOD CODE' (0018), 'ORIGINAL FOOD NAME' (Badem oljusteni suvi), 'ENGLISH FOOD NAME' (Almonds, blanched, dried), and 'Country: Serbia'. An 'EXIT' button is visible. The main content area has several tabs: 'FOOD NAME AND IDENTIFIERS', 'STANDARD AND GENERAL FOOD DESCRIPTION', 'PHYSICAL AND OTHER PROPERTIES OF FOOD' (which is selected), 'VALUES', 'SAMPLE', and 'QUALITY ASSESSMENT'. Under the selected tab, there are two sections: 'Physical properties of food' and 'Other properties of food'. The 'Physical properties of food' section includes fields for Edible portion (100.0000), Nature of edible portion, Nature of waste, Typical portion/serve size (100.0000), Typical weight per piece (100.0000), Colour (brown/white), Final preparation, Specific gravity (0.0000), Nitrogen to protein conversion factor (0.0000), and Fatty acid conversion factor (0.0000). The 'Other properties of food' section includes fields for Producer, Distributor, Retailer, and Remarks.

Slika 8. Physical and other properties of food

Opcija **PHYSICAL AND OTHER PROPERTIES OF FOOD** – sadrži dodatne informacije o namirnici (detaljno objašnjenje svih podataka je dato u technical annex-u)

1. Edible portion – veličina porcije koja se servira kao obrok
2. Nature of edible portion
3. Nature of waste
4. Typical portion / serving size
5. Typical weight – piece size
6. Colour
7. Final preparation
8. Specific gravity
9. Nitrogen to protein conversion factor
10. Producer
11. Retailer
12. Distributer

EuroFIR
File Edit Window Help

PROPERTIES OF THE FOOD ENTITY

FOOD CODE: 0018 ORIGINAL FOOD NAME: Badem oljusteni suvi Country: Serbia
ENGLISH FOOD NAME: Almonds, blanched, dried

FOOD NAME AND IDENTIFIERS | STANDARD AND GENERAL FOOD DESCRIPTION | PHYSICAL AND OTHER PROPERTIES OF FOOD | VALUES | SAMPLE | QUALITY ASSESSMENT

COMP.GROUP	COMPONENT	GROUP COMPONENT	COMPONENT DESCRIPTION	SELECTED	VA	UNIT	METHOD	METHOD DES	METHOD IND	METHOD IND	REFERENCE	REFERENCE	REFERENCE	REFERENCE	REFERENCE	REFERENCE	REFERENCE	REFERENCE
1.1.3	Other macrocomp	WATER	water (moisture)		4.4700	g	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.1.1	Energy	ENERC	energy, total metabolisat		581.0000	kcal	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.1.2	Energy-contributing	PROT	protein, total		21.9400	g	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.1.2	Energy-contributing	CHO	carbohydrate		19.9400	g	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.1.2	Energy-contributing	FAT	fat, total (total lipid)		50.6200	g	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.3.2.1	Animal sterols	CHORL	cholesterol		0.0000													
1.3.1.3	Mono-unsaturated fa	FAMS	fatty acids, total monoun		32.2900	g	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.3.1.2	Saturated fatty acids	FASAT	fatty acids, total saturate		3.8900	g	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.3.1.4	Poly-unsaturated fat	FAPU	fatty acids, total polyuns		12.0500	g	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.3.1.3	Mono-unsaturated fa	F18:1	fatty acid 18:1 (octadeca		0.0000													
1.3.1.4	Poly-unsaturated fat	F18:2	fatty acid 18:2		0.0000													
1.3.1.4	Poly-unsaturated fat	FAPUN3	fatty acids, total n-3 poly		0.0000													
1.6.3	Water soluble vitam	FOL	folate, total		0.0000													
1.6.3	Water soluble vitam	PANTAC	pantothenic acid (vitamin		0.3100	mg	X	Method type r	MIR003	Analytical or d	F	File or Database	The Canadian Nutrient					
1.2.4	Dietary fibre	FIBINS	fibre, water-insoluble		14.3000	g												

EDIT INSERT DELETE PRINT COPY METHOD TO OTHER PARAMETERS COPY REFERENCE TO OTHER PARAMETERS

Slika 9. Unos vrednosti parametara

VREDNOSTI PARAMETARA

Parametri su mikro i makronutrienti koje sadrži namirnica. Za svaki parametar pored same vrednosti parametra se definiše i mnoštvo ostalih atributa koji tačno određuju parametar.

To su dodatni atributi vezani za samu **vrednost** parametra, atributi koji opisu **metodu** kojom je dobijena vrednost parametra, atributi koji opisu **referencu** u kojoj je publikovana vrednost parametra kao i vrednosti za retention faktore koje postoje za svaki mikronutrient i koji variraju od načina pripreme.

The screenshot shows the EuroFIR software interface. At the top, there are logos for Capacity Development in Nutrition, DNR (Department of Nutritional Research), and the University of Belgrade Institute for Medical Research. Below the logos, there is a menu bar (File, Edit, Window, Help) and a window title bar (EuroFIR). The main area is titled 'VALUES' and contains several input fields and a table.

Input fields include:

- FOOD CODE: 0018
- ORIGINAL FOOD NAME: Badem oljusteni suvi
- ENGLISH FOOD NAME: Almonds, blanched, dried
- Country: Serbia
- EXIT button

The main data entry area is divided into four columns: VALUE, METHOD, REFERENCE, and RETENTION FACTORS. The VALUE column contains fields for COMPONENT GROUP (Energy), COMPONENT (energy, total metabolisable; calculated from ENERC), VALUEID (0018_02), SELECTED VALUE (581.0000), UNIT (kilocalorie), MATRIX UNIT (per 100g edible portion), ACQUISITION TYPE (Food composition table), DATE OF GENERATION (06.06.2010), DATE OF EVALUATION (10.07.2009), and VALUE TYPE (value type not known).

The REFERENCE column contains a table of analytical statistics:

Analytical Statistics	
No OF VALUES	1
ANALYTICAL PORTION SIZE	20
No. OF ANALYTICAL PORTION REPLICATES	30
MEAN	4.1234
MEDIAN	6.2580
MINIMUM	1.2465
MAXIMUM	65.5465
STANDARD DEVIATION	413.5465
STANDARD ERROR	4.5465

At the bottom of the form, there is a note: * Fields marked with * are MANDATORY type and MUST BE FILLED.

Slika 10. – Atributi koji određuju vrednost parametra

Na ovoj formi se unose podaci koji tačno definišu vrednost parametra (detaljno objašnjenje svakog polja je dato u technical annex-u).

1. Component group – bira se iz unapred definisanog EuroFIR šifarnika za grupe komponenata
2. Component – bira se iz unapred definisanog EuroFIR šifarnika za komponente
3. Value ID
4. Selected value
5. Unit – bira se iz unapred definisanog EuroFIR šifarnika za merne jedinice
6. Matrix unit – bira se iz unapred definisanog EuroFIR šifarnika za matrix jedinice
7. Acquisition type – bira se iz unapred definisanog EuroFIR šifarnika za tip akvizicije
8. Date of generation
9. Date of evaluation
10. Value type – bira se iz unapred definisanog EuroFIR šifarnika za tip vrednosti
11. Number of values
12. Analytical portion size
13. Number of analytical portion replicates
14. Mean value
15. Median value
16. Minimum value
17. Maximum value
18. Standard deviation value
19. Standard error value

Od gore navedenih polja obavezno je popuniti polje Component, Unit, Acquisition type i Value type (bira se iz EuroFIR thesautija) dok popunjavanje ostalih polja je opciono.

The screenshot shows the EuroFIR software interface. At the top, there are logos for Capacity Development in Nutrition, DNR, and the University of Belgrade Institute for Medical Research. The main window is titled 'EuroFIR' and contains a 'VALUES' section. This section includes a header with 'FOOD CODE' (0018), 'ORIGINAL FOOD NAME' (Badem oljusteni suvi), 'ENGLISH FOOD NAME' (Almonds, blanched, dried), and 'Country: Serbia'. Below this is a table with columns for 'VALUE', 'METHOD', 'REFERENCE', and 'RETENTION FACTORS'. The 'METHOD' column contains several fields: 'METHOD TYPE*' (Method type not known), 'METHOD INDICATOR*' (Analytical or calculation method not known), 'METHOD PARAMETER' (0.000000), 'OFFICIAL METHOD', 'GENERAL DESCRIPTION', 'Analytical key steps' (with checkboxes for Extraction, Separation, Identification, Detection, Quantification), 'OTHER METHOD KEY STEPS', and 'ADDITIONAL DESCRIPTORS'. The 'REFERENCE' column contains 'Laboratory performance' metrics: 'ANALYTICAL PERFORMANCE DETAILS', 'ACCURACY', 'APPLICABILITY', 'PRECISION' (0.0000), 'REPEATABILITY (Intra-labor)' (0.0000), 'REPRODUCIBILITY (Intra-labor)' (0.0000), 'RECOVERY' (0.0000), 'SELECTIVITY' (0.0000), 'SENSITIVITY' (0.0000), and 'SPECIFICITY' (0.0000). There is also a 'REMARKS' field. A note at the bottom states: '* Fields marked with * are MANDATORY type and MUST BE FILLED'.

Slika 11. – Atributi koji određuju metodu kojom je dobijena vrednost parametra

Na ovoj formi se unose podaci koji tačno definišu metodu kojom je dobijena vrednost svakog pojedinačnog parametra – podaci se popunjavaju ako su dostupne informacije laboratorijske analize (detaljno objašnjenje svakog polja je dato u technical annex-u).

1. Method type – bira se iz unapred definisanog EuroFIR šifarnika za metode
2. Method indicator – bira se iz unapred definisanog EuroFIR šifarnika za metod indikatore
3. Method parameter
4. Official method description
5. General description
6. Analytical key steps (extraction, separation, identification, detection, quantification)
7. Other method key steps
8. Additional descriptors
9. Analytical performance
10. Accuracy
11. Applicability
12. Precision
13. Repeatability
14. Reproducibility
15. Recovery
16. Selectivity
17. Sensitivity
18. Specificity

Od gore navedenih polja obavezno je popuniti polje Method type i Method indicator (bira se iz EuroFIR thesautija) dok popunjavanje ostalih polja je opciono.

The screenshot shows the EuroFIR software interface. At the top, there are logos for Capacity Development in Nutrition, DNR (Department of Nutritional Research), and the University of Belgrade Institute for Medical Research. The main window is titled 'EuroFIR' and contains a 'VALUES' section with the following data: FOOD CODE: 0018, ORIGINAL FOOD NAME: Badem oljusteni suvi, ENGLISH FOOD NAME: Almonds, blanched, dried, and Country: Serbia. Below this is a table with four columns: VALUE, METHOD, REFERENCE, and RETENTION FACTORS. The REFERENCE column contains a form with various fields for citation information, including Reference Code, Citation, Title, Authors, Publication Date, Version, Original Language, ISBN, ISSN, First Edition Date, Edition Number, Number of Pages, Book Title, Book Editor, Long Journal Name, Abbreviate Journal Name, Issue, Journal Volume, Series Name, Series Number, Report Title, File Format, WWW, Operating System, Valid From, Primary Publication Media, and Remarks. A note at the bottom of the form states: '* Fields marked with * are MANDATORY type and MUST BE FILLED'.

Slika 12. – Atributi koji određuju referencu u kojoj je publikovana vrednost parametra

Na ovoj formi se unose podaci koji određuju referencu u kojoj je publikovana vrednost parametra (detaljno objašnjenje svakog polja je dato u technical annex-u).

1. Reference code – bira se iz unapred definisanog EuroFIR šifarnika za reference
2. Citation
3. Title
4. Authors
5. Publication date
6. Version
7. Original language
8. ISBN
9. ISSN
10. First edition date
11. Edition number
12. Number of pages
13. Book title
14. Book editor
15. Long journal name
16. Abbreviate journal name
17. Issue
18. Journal volume
19. Series name
20. Series number
21. Report title
22. File format
23. www address
24. operating system
25. Valid from

26. Primary publication media

Od gore navedenih polja obavezno je popuniti polje Reference ceode (bira se iz EuroFIR thesauri-ja) dok popunjavanje ostalih polja je opciono i zavisi od vrste dokumenta gde je publikovan podatak.

LANGUAG GF	PREPARATION METHOD	RETENTION FACTOR	REFERENCE	REMARK
G0004	COOKED BY DRY HEAT	0.0000		
G0005	BAKED OR ROASTED	0.0000		
G0006	BOILED OR GRILLED	0.0000		
G0007	CHARCOAL BROILED	0.0000		
G0008	GRIDDLED	0.0000		
G0009	POPPED	0.0000		
G0010	TOASTED	0.0000		
G0011	COOKED BY MICROWAVE	0.0000		
G0012	COOKED BY MOIST HEAT	0.0000		
G0013	COOKED IN WATER OR WATER BASED LIQUID	0.0000		
G0014	BOILED	0.0000		
G0015	BOILED AND DRAINED	0.0000		
G0016	BOILED IN LARGE AMOUNT OF LIQUID	0.0000		
G0017	BOILED IN SMALL AMOUNT OF LIQUID	0.0000		
G0018	BOILED AND UNDRAINED	0.0000		

* Fields marked with * are (MANDATORY) type and MUST BE FILLED

Slika 13. – Retention factors

Na ovoj formi se unose retention faktori (faktor gubljenja sadržaja mikronutrijenta) – izraženo u procentima, zavisi od načina pripreme (termičke obrade) namirnice. Podaci o retention faktorima su opcioni. Pored samog procenta retention faktora je moguće uneti i referencu (izvor podatka) kao i napomenu.

The screenshot shows the 'SAMPLE' form in the EuroFIR application. The form is titled 'SAMPLE' and has a menu bar with 'File', 'Edit', 'Window', and 'Help'. The main content area is divided into several sections:

- Header:** EuroFIR logo, FOOD CODE: 0018, ORIGINAL FOOD NAME: Badem oljusteni suvi, ENGLISH FOOD NAME: Almonds, blanched, dried, and an EXIT button.
- Country:** Serbia
- COMPONENT:** energy, total metabolisable; calculated from er (dropdown menu)
- SAMPLE ID*:** 125
- SAMPLING REFERENCE:** 125/20
- REASON FOR SAMPLING:** (empty text box)
- SAMPLING STRATEGY:** (empty text box)
- PLACE OF SAMPLING:** (empty text box)
- DATE OF SAMPLING:** (empty date field)
- PRIMARY SAMPLE UNIT SIZE:** (empty text box)
- No. OF PRIMARY SAMPLE UNITS:** 0
- COMPOSITE SAMPLE:**
- PRIMARY SAMPLE HANDLING:** (empty text box)
- DATE OF ARRIVAL AT LABORATORY:** (empty date field)
- LABORATORY STORAGE:** (empty text box)

* Fields marked with * are MANDATORY type and MUST BE FILLED

Slika 14. Sampling procedure –

Forma **SAMPLING PROCEDURE** služi za evidentiranje podataka o uzorkovanju namirnica, o planu i postupku uzorkovanja namirnica.

Podaci koji se evidentiraju (detaljno objašnjenje navedenih polja je dato u technical annex-u) su:

1. Component – bira se iz EuroFIR thesaurija
2. Sample ID
3. Sampling reference
4. Reason for sampling
5. Sampling strategy
6. Date of sampling
7. Primary sample unit size
8. Number of primary sample units
9. Composite sample
10. Primary sample handling
11. Date of arrival at laboratory
12. Laboratory storage

Slika 15. Quality Assessment

Forma za određivanje kvaliteta podataka je predviđena za unos zbirnih bodova za određene parametre po EuroFIR standardima.

Podaci koji se unose (detaljno objašnjenje ovih polja je dato u technical annex-u) su:

1. Value ID
2. Quality assessment ID
3. Quality system
4. Quality reference
5. Quality food description
6. Quality of component identification
7. Quality of sampling plan
8. Quality of sample number
9. Quality of sample handling
10. Quality of method
11. Quality of analytical performance
12. Quality of food matching
13. Quality of representativeness
14. QI – EuroFIR Quality index

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EuroFIR
www.eurofir.net

FOODS

Print Preview
100%

Code	Original food name	English food name	Food group	Country
0495	Kukuruzne pahuljice, Kornifeks	Cornflakes	GRAIN OR GRAIN PRODUCT	-
1643	Kukuruz mladi zuti	Corn,sweet, yellow, canned	GRAIN OR GRAIN PRODUCT	-
1645	Kukuruz mlad zrno smrznuto	Corn, sweet, frozen	GRAIN OR GRAIN PRODUCT	-
1678	Brasno kukuruzno	Corn flour	GRAIN OR GRAIN PRODUCT	-
1695	Griz kukuruzni	Corn grits	GRAIN OR GRAIN PRODUCT	-
1734	Kukuruzni skrob	Cornstarch	GRAIN OR GRAIN PRODUCT	-
1764	Hleb kukuruzni	Corn bread	GRAIN OR GRAIN PRODUCT	-
1994	Kukuruz sa celim zrnom, konzerviran	Corn, whole grain, canned	VEGETABLE OR VEGETABLE PRODUCT	-
2741	Ulje kukuruzno	Corn oil	FAT OR OIL	-
3098	Kukuruznobrasno,belo,celozrno	Cornflour,whole-grain,white	GRAIN OR GRAIN PRODUCT	-
3099	Kukuruznobrasno,celozrno,zuto	Cornflour,whole-grain,yellow	GRAIN OR GRAIN PRODUCT	-
3100	Kukuruz,beli	Corn,white	GRAIN OR GRAIN PRODUCT	-
3101	Kukuruz,zuti	Corn,yellow	GRAIN OR GRAIN PRODUCT	-
3102	Kukuruzna kasa,celozrno,belo	Corn meal,wholegrain,white	GRAIN OR GRAIN PRODUCT	-
3103	Kukuruzna kasa,konzervirana,bela	Hominy,canned,white	GRAIN OR GRAIN PRODUCT	-
3295	Keks od kukuruznog brasna	Corn flour biscuit	GRAIN OR GRAIN PRODUCT	-

Slika 16. – Prikaz štampanog izveštaja

Na formama sa opcijom “PRINT” se dobija pregled podataka tabele. Izveštaji prvo se uvek pojave na ekranu odakle ih je moguće štampati ili preusmeriti u pdf format.

EuroFIR - Vocabulary

METHOD TYPES | METHOD INDICATOR | MATRIX UNIT | COMPONENTS | COMPONENT GROUPS | ACQUISITION | REFERENCES | UNITS

VALUE TYPES | FOOD GROUPS | SABLON | COOKING METHODS | COUNTRIES | USERS

CODE	DESCRIPTION	NOTE	ADDITION
AR	as reported	Use when the Selected Value was assigned as reported	
AV	average	Used when the Selected Value was chosen as the average. For Value Type AV, the only statistical fields that	
BE	best estimate	Used when the Selected Value was chosen as the best estimate	
BL	below detection limit	Used when it is known that the component is present. BL will often be used with a Selected Value > 0.1	
E	other value type	Use for other Value Type not defined in this thesaurus. E = else. Except for its use specified in a EuroFIR	
LT	less than	Use only if the Selected Value is the highest value, if the value reported is less than the Selected Value	
LZ	logical zero	Used when the Selected Value is assigned as a logical zero	
MD	median	Used when the Selected Value corresponds to the value reported in the Median field when details of the	
MI	minimum	Use when the Selected Value was chosen as the minimum. The Selected Value corresponds to the value reported	
MN	mean	Used when the Selected Value was chosen as the mean. The Selected Value corresponds to the value reported	
MT	more than	Use only if the Selected Value is the lowest value, if the value reported is more than the Selected Value	
MX	maximum	Used when the Selected Value was chosen as the maximum. The Selected Value corresponds to the value reported	
N	unknown	Use this value type together with a blank Selected Value. Value Type "N" is only useful in the tables	
TR	trace	Use Trace only when there is evidence that some amount of the component is present. The trace descriptor is often used in printed food	

REFRESH DATA FROM INTERNET

INSERT NEW DATA

EDIT DATA

DELETE DATA

PRINT

EXPORT DATA TO XLS FORMAT

CODE: MD

DESCRIPTION: median

NOTE: Used when the Selected Value corresponds to the value reported in the Median field when details of the statistical results are given.

ADDITIONAL INFORMATION:

REPLACE CANCEL

* Double click on the header of column to sort the data in it, *To search for the certain entry select the column and start typing

BACK

Slika 17. – EuroFIR standard vocabularies

Forma EuroFIR vocabulary sadrži sve standardne šifarnike definisane u technical annex-u. Jedinstveni šifarnici (standardi) su potrebni da bi se ostvarila razmena podataka izmedju pojedinih nacionalnih baza namirnica. Struktura svakog šifarnika je ista:

- Code - Šifra - obavezno polje
- Description - opis standarda - obavezno polje
- Note - napomena – opciono polje
- Additional information – dodatna informacija – opciono polje

Šifra i opis su obavezna polja, dok napomena i dodatna informacija daju opširnije objašnjenje svakog termina.

EuroFIR šifarnici (thesaury) su sledeći:

1. Method types
2. Method indicators
3. Components
4. Component groups
5. Units
6. Matrix Units
7. Value types
8. Food groups
9. Acquisition types
10. References
11. Cooking methods

Annex 4. Example of entered data

REGIONAL FOOD COMPOSITION DATABASE - Mozilla Firefox

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REGIONAL FOOD COMPOSITION DATA...

EuroFIR www.eurofir.net DNR Department of Nutritional Research

500.2628556

FOOD NAME AND IDENTIFIERS	
Food Code	250
Category	crovda
Food name (orig)	mljeko, brijuni, obogaćeno, svet
Food name (englis)	milk, fortified, sweet
Schedule Food name	
Origin (geographical)	Domat
Code: Food Reference	
Article Number per code	32041002501
E-number	
Int Code	



PHYSICAL AND OTHER PROPERTIES OF FOOD			
Edible portion	100	Colour	
Name of edible portion		Physical preparation	
Moisture of water		Specific Gravity	0.98
Typical portion, service size	100	Nitrogen to Protein Conversion Factor	0.16
Typical weight per piece	100	Fatty acid conversion Factor	0.98
Producer	UNIKLA O.O.	Retailer	
Distributor		Remarks	

VALUES			SAMPLE...	QUALITY ASSESSMENT...
COMPONENT ID	VALUE	UNIT	DESCRIPTION	DETAILS
ASH	0		ash (dry wt)	DETAILS...
CHOL	0		chole	DETAILS...
CA	100	mg	calcium	DETAILS...
CRSTL	0		beta-carotene	DETAILS...
CHD	47	g	carbohydrate	DETAILS...
CHDLH	0		chole	DETAILS...
CHDRH	0		cholesterol	DETAILS...
CLB	0		calcium	DETAILS...
CB	0		calcium	DETAILS...

Done

REGIONAL FOOD COMPOSITION DATABASE - Mozilla Firefox

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REGIONAL FOOD COMPOSITION DATA...

VALUE PROPERTY				
Component Group	1.7.1	Macroelements	ANALYTICAL STATISTICS	
Component	CA	calcium	No of Values	0
Value ID		3559_36	Analytical portion size	
Selected Value		160	No of analytical portion replicates	
Unit	mg	milligram	Mean	0.0000
Matrix Unit			Median	0.0000
Acquisition Type	L	Food label, product information	Minimum	0.0000
Date of Generation		2010-06-11	Maximum	0.0000
Date of Evaluation		0000-00-00	Standard Deviation	0.0000
Value Type	X	value type not known	Standard Error	0.0000

METHOD PROPERTY				
Method Type			LABORATORY PERFORMANCE	
Method Indicator		Analytical performance details		
Official Method		Accuracy		
General Description		Applicability		
Extraction	0	Precision		0.0000
Separation	0	Repeatability (Intra-labor)		0.0000
Identification	0	Reproducibility (Intra-labor)		0.0000
Detection	0	Recovery		0.0000
Quantification	0	Selectivity		0.0000
Other Method key steps		Sensitivity		0.0000
Additional Descriptors		Specificity		0.0000
Remarks				

REFERENCE PROPERTY			
Reference code		Book Editor	
Reference Description		Long Journal Name	
Citation		Abbreviate Journal Name	
Title		Issue	

Done