

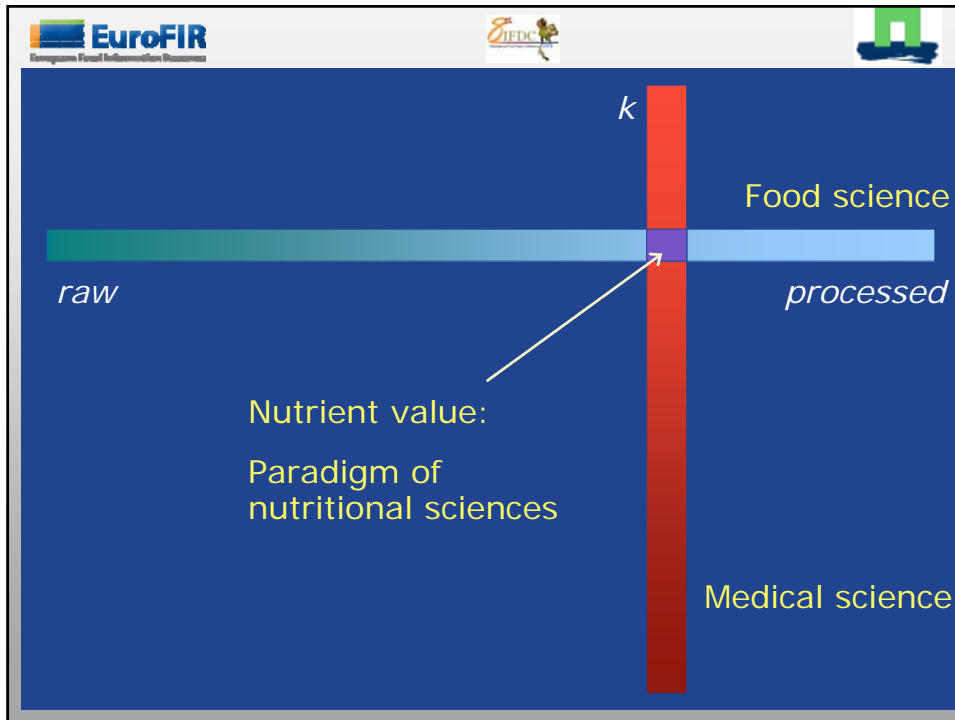
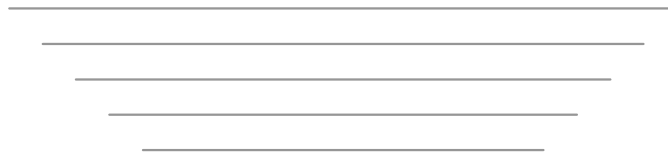
EUROFIR'S DIGITAL LEARNING MATERIAL (E-LEARNING)
FOR EDUCATION IN FOOD COMPOSITION DATA

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8th IFDC, 1-3 Oct 2009, Bangkok, Thailand



Name	Weight	Fibre (g)	Energy (kJ)	Energy (kcal)	Carbohydrate (g)	Vitamin D (µg)	Vitamin C (mg)	Iron (mg)	Calcium (mg)
Cheese 17% fat	100	0.0	1,170	280	1.5	0.12	0	0.20	880
Cheese and ham pie	100	0.7	1,162	278	15.9	1.65	2	0.72	169
Cheese and h...								6.20	96
Cheese cake m...								0.59	87
Cheese cake with cr...			1,200		20.8		3	0.40	61
Cheese crackers								0.93	122
Cheese doodle								0.90	59
Cheese sauce			672		8.4		0	0.12	227
Cheese sauce							0	0.65	173
Cheese sou...								0.70	305
Processed chee...							0	0.30	450
Processed cheese 20% fat	100	0.0	1,059	253	0.1	0.14	0	0.20	630
Processed cheese 8% fat	100	0.0	612	146	0.5	0.05	0	0.30	510
Processed cheese c 16% fat	100	0.0	871	208	1.5	0.10	0	0.20	570
Processed cheese c 22% fat	100	0.0	1,144	273	8.2	0.12	0	0.13	291
Processed cheese low fat 4%	100	0.0	488	117	2.0	0.02	0	0.30	513


Why develop digital-learning material?

- Evaluations of Food Comp courses showed that background and level of knowledge of participants is very diverse
- E-learning modules can contribute to personalized learning
- Can contribute to standardization and aiding compilers in assessing data quality
- Efficiency of topics taught in courses can be enhanced with E-learning
- Contributes to a larger variety of educational activities and more attractive course program

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E-learning

- **First module: nutrient analysis for non-chemists**
- **Design based on educational principles outlined in**



- **Educational principles to achieve competence are based on:**
 - **Motivation**
 - **Authentic learning context**
 - **Active learning**
 - **Visualization of important concepts**
 - **Reduce unnecessary cognitive load**

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Learning objectives

- Understand macronutrient analyses
 - Chemical/technical principles
 - Characteristics
 - Strengths and limitations
- Interpret laboratory results and evaluate
- Critically communicate with laboratory
 - Analytical methods and results.

**Personalized
Interactive
learning**

E-learning

- Modules mainly based on teaching material developed and refined in Wageningen Food Comp courses
- “Storyboard” of E-learning module was peer reviewed by compiler and food chemist
- Pre-tested in FoodComp course Bratislava 2008 (fat and fatty acid module)
- Evaluated by participants on
 - Understanding of important concepts
 - Navigational aspects of module
 - Degree of difficulty
 - Clarity of module
 - Triggering motivation to study

Overall rating: 4.4
(on scale from 1-5)

E-learning

Interested:

Contact:

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8th International Food Data Conference

October 1-3, 2009

Bangkok, Thailand

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8th IFDC
International Food Data Conference 2009


Nutrient-Analysis for non-chemists Glossary


Introduction
 Case 1: Fats & fatty acids
 Case 2: Carbohydrates & fibres
 Case 3: Proteins & amino acid

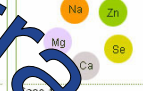
Welcome to the EuroFIR module: Nutrient-Analysis for non-chemists

Audience:
This module is intended for non-chemists who are involved in Food Composition DataBase (FCDB) programs or users of FCDBs who want to know more about the basic strengths and limitations of analysis methods frequently used to determine macronutrient composition of food. Enjoy your stay!


Case 1
Fats & fatty acids


Case 2
Carbohydrates & dietary fiber


Case 3
Proteins & amino acids


Case 4

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Developers:
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