

# Healthcare Work



The image features a large, 3D cube structure composed of various colored panels (blue, yellow, green, purple, white). Each panel displays a different scene related to healthcare and education. The scenes include: a classroom with a teacher and students, a couple holding a document, a scientist in a lab coat, a person using a computer, a group of people, a close-up of a green gel electrophoresis result, and a person holding a clipboard. The cube is set against a white background with a reflection.

# Contents

- Background
- Nordic Food Analysis Network, NFAN
- Fostering the Quality and Use of Nordic Food Composition Data
- Nordic Food Composition and Labelling (NordCoLa)
- Summary

# Background

- Nordic food composition database network NORFOODS was launched in 1982;
- Denmark, Finland, Faroes, Greenland, Iceland, Norway, Sweden, Åland;
- Aim to harmonise food composition database work in the Nordic countries (food classification, recipe calculation procedures, definitions of nutrients);
- Collaboration projects funded mainly by the Nordic Council of Ministers and by the participating organisations.



# Nordic collaborative projects

- NORLEX project: Nordic Food Glossary. TemaNord 2001:515.
- NORFOODS 2000 Project: Nordic principles for quality assessed food composition data and dietary calculations. TemaNord 2002:522  
**- results of Nordic dietary surveys not directly comparable**
- NORFOODS 2002: Nordic Food Data on the Internet 2002:413.
- Öhrvik V et al: Improving food composition data by standarizing calculation methods: TemaNord 2015, 56 pp.



# Background of the NFAN

- All the Nordic countries compile and manage their national databases and perform chemical analysis on food composition.
- Selection of new food items to be analysed is wide, but the resources for the analyses are very limited.
- Managing and updating FCDBs is resource intensive.
- Essential to work together to use the limited resources with the most advantageous way.
- Nordic analyses are needed to cover the food items typical for the Nordic Diet.
- Similarities in the culinary cultures between the Nordic countries are evident.

# Nordic Food Analysis Network, NFAN



Jenna  
Rautanen  
Info-coordinator  
2013-2014

- Nordic Food Analysis Network – Integration and Cooperation of Food Analysis Programs in the Nordic Countries
- Meeting held in Reykjavik on June 2th, 2012
- The project was of special importance to Finland. The national food analysis program was just starting for the Finnish National Food Composition Database (Fineli).
- In the other Nordic countries, the food analyses were well-established procedures.

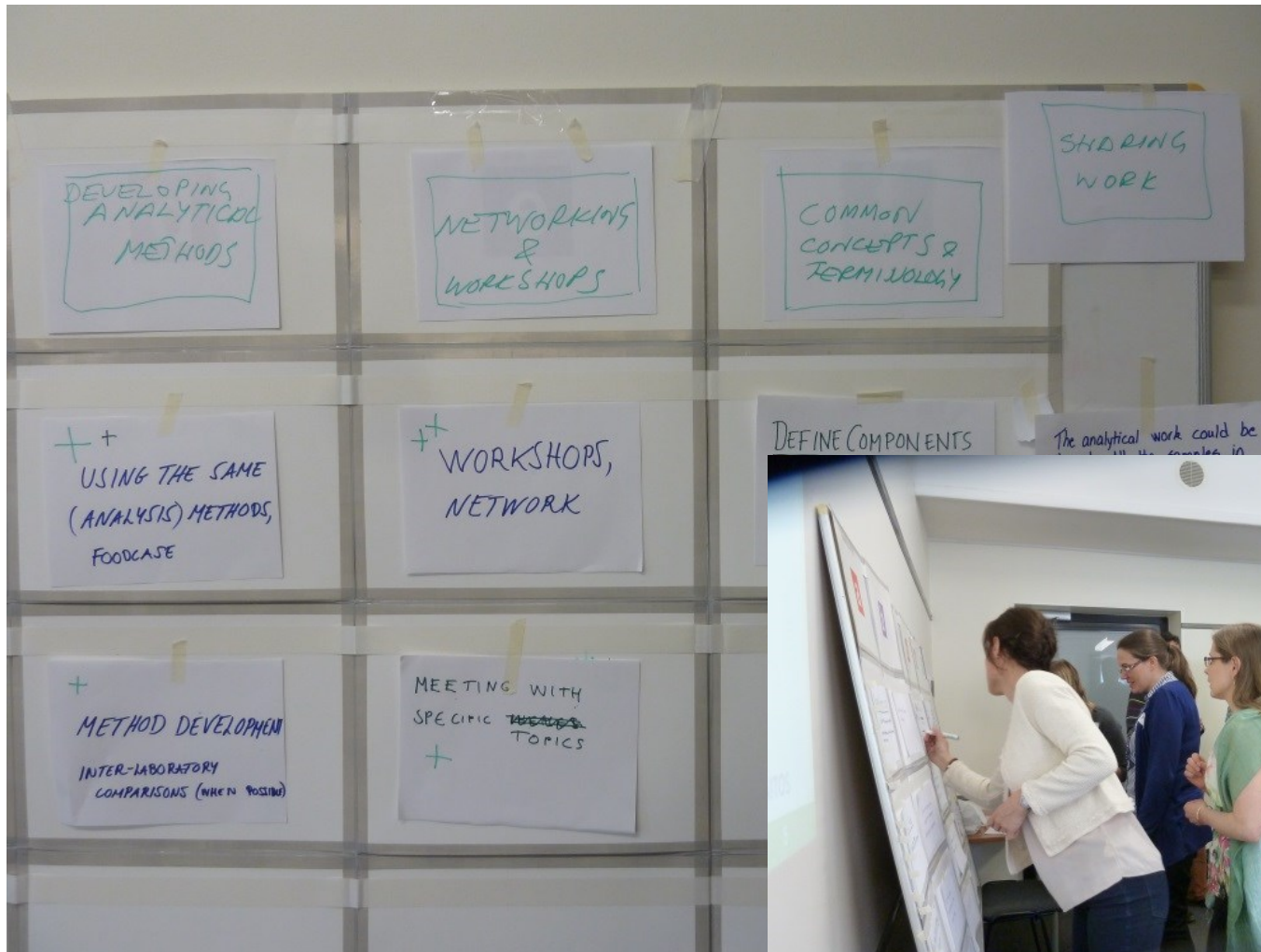


# Nordic Food Analysis Network 2013-2016

- Collaboration between Nordic partners
- Working together with existing networks
  - Nordic Committee on Food Analysis (NMKL)
  - EuroFIR
- Extranet site of the NFAN:  
<https://www3.thl.fi/wiki03/display/Norfoods/Home>
- LinkedIn



# Annual meetings





# Nordic Food Analysis Network

## – preventing the overlapping analyses

- **Imported foods e.g. avocado, banana etc. are mostly similar in every Nordic country**
  - overlapping analyses should be avoided
- **Analyses of the industrial foods and ingredients**
  - baby foods
  - well-known Nordic industrial brand name products that are widely used in all Nordic countries
  - common industrial ingredients
- **Fibre content of commonly eaten foods extremely important**
  - whole grains important in the Nordic diet
  - the recent change in the definition of fibre
  - change in the analytical method of fibre
- **Coordination of plans, updating and sharing data**
- **Comparative analyses (fibre, iodine, sodium)**



# Sampling

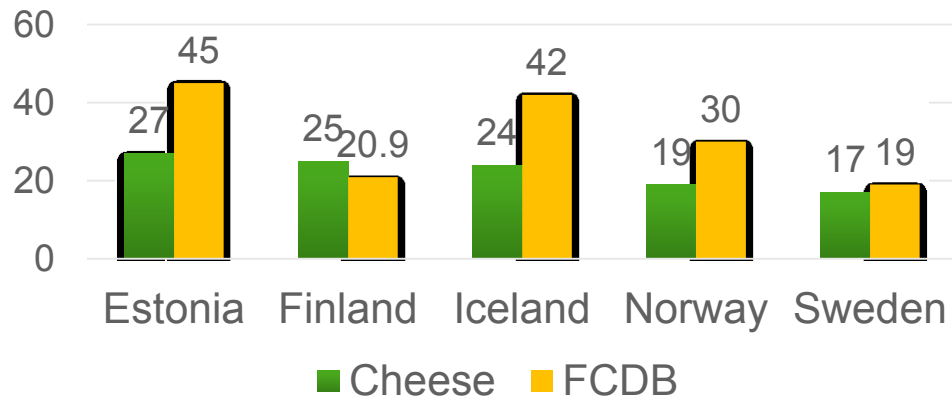
- The samples were collected from Estonia, Finland, Iceland, Norway and Sweden
- Based on the supply and the market shares of each country
- The subsamples (n=12) were pooled and sent to Evira, Finland for the analysis



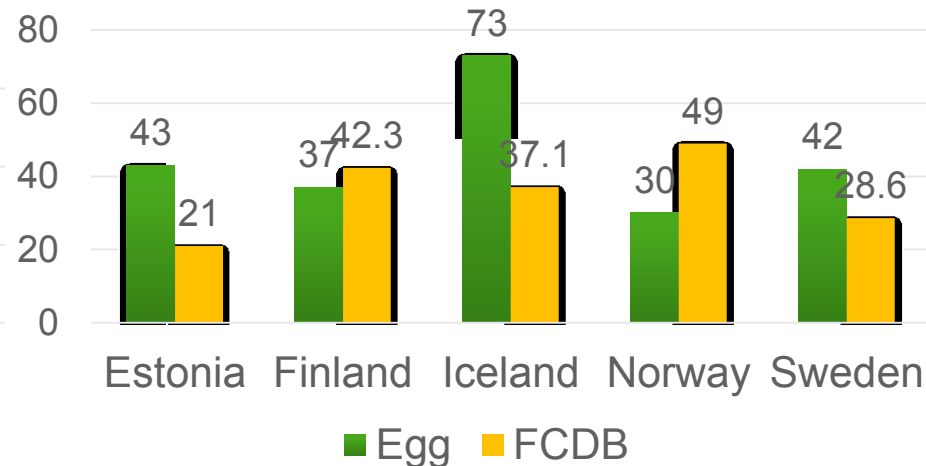
# Iodine analysis results vs. FCDBs ( $\mu\text{g}/100\text{ g}$ , fresh weight)



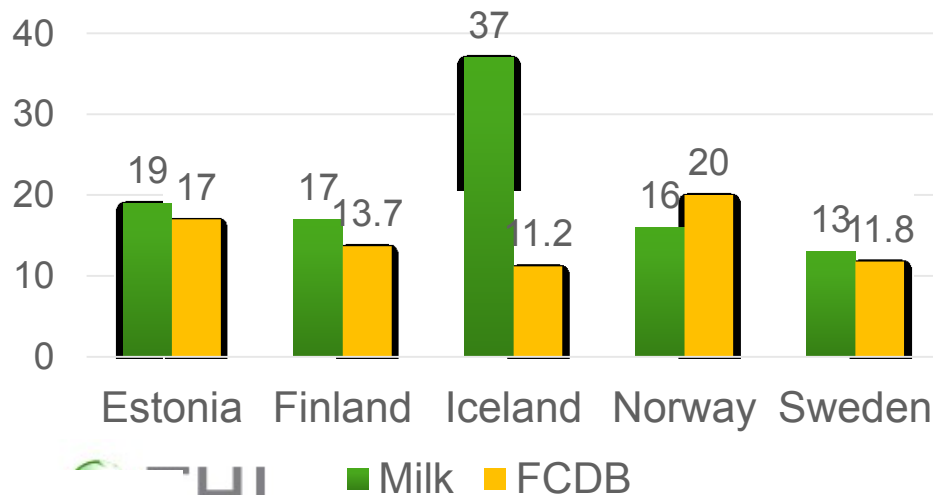
**Low-fat (~17 %), edam-type cheese**



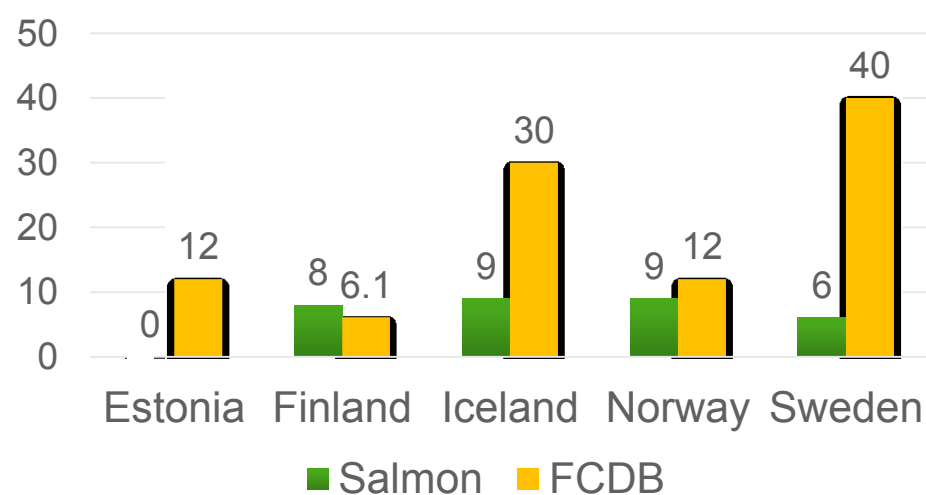
**Egg, conventionally produced**



**Whole milk (~3 % fat)**



**Farmed salmon (*Salmo salar*)**



(Pastell et al. 2016)

# Differences between the Nordic Evira foods and composition databases

- Iodine content varies from country to country
- Two-fold higher iodine contents in Icelandic conventionally produced egg and whole milk, as well as in Swedish organic egg
  - Fish-rich feed used in Iceland may explain the high iodine contents
- Analyzed results were lower than current values in FCDBs in low-fat cheese and farmed salmon
- Some differences also in fibre and sodium results.
- Recipe calculation methods are getting closer.
- Fortification practices are different in the countries.
- Supplement information varies.









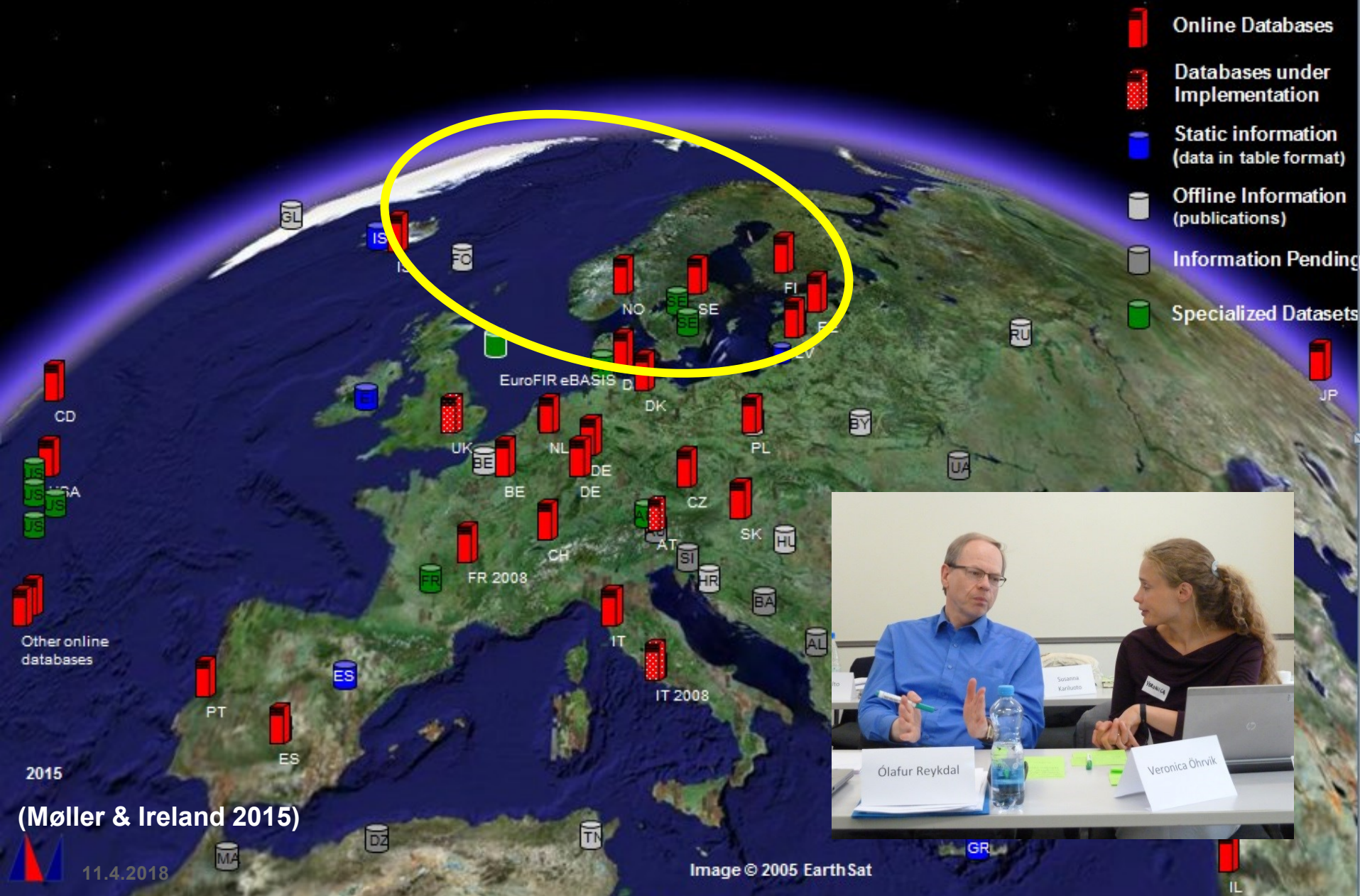


# European Food Composition Information

European Food Composition on the Internet

**EuroFIR**  
European Food Information Resource

-  Online Databases
-  Databases under Implementation
-  Static information (data in table format)
-  Offline Information (publications)
-  Information Pending
-  Specialized Datasets



Déjà Vue?



Not a surprise!

The meeting in February  
1982 in Uppsala was  
something!

Déjà Vue?



With Åke (Bruce)  
we put forward this  
fantastic idea of a  
common food  
composition database to  
be compiled on a Nordic  
CORE FOOD LIST.

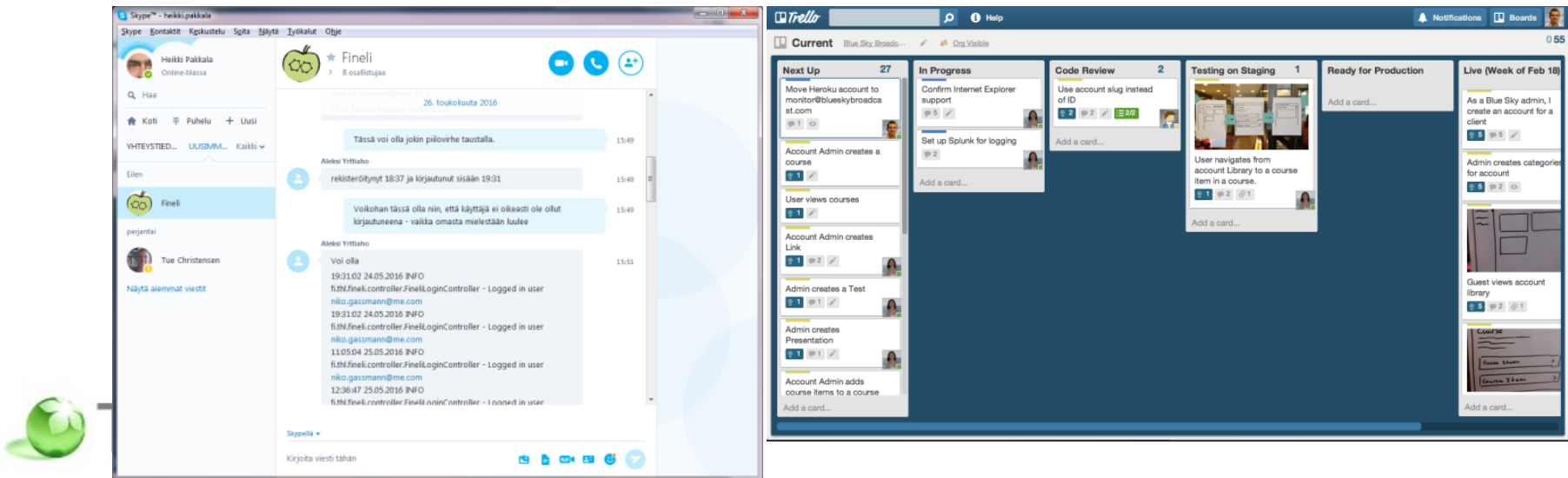


# Better connection points and interfaces than ever

- From closed information system monoliths to interface based systems and frameworks
- Smaller apps talking with each other
- Application programming interfaces (APIs)

# Work over organizational barriers

- Cooperation at day-to-day level possible
- Virtual team tools over Internet
  - Visualize, organize, prioritize, track
  - Kanban board based (e.g. Trello, Jira)
- From videoconferencing to instant messaging
  - Lync, Skype, what's up



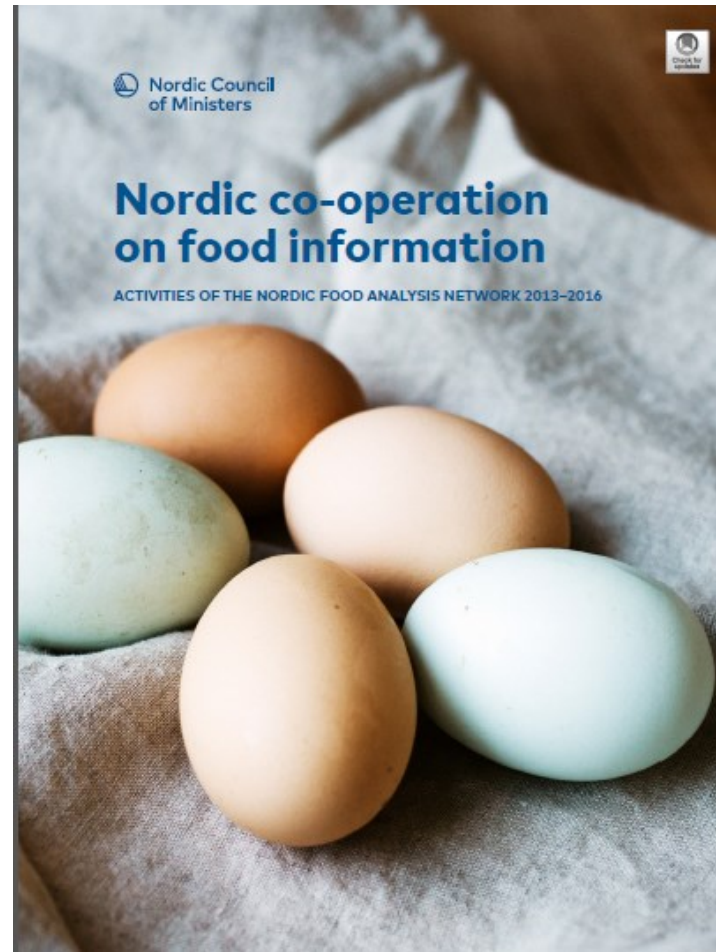


# From data to innovation

- Food composition data themselves are not important
  - utilizing this information is!
  - and quality is (the GIGO principle applies)
- How to connect with end users and make open innovations?
- How to support the end users?



# The NFAN Report 2017



# Fostering the quality and use of Nordic food composition data

(Seminar held in Helsinki Finland in October, 2016)

- Update on the Nordic food composition databases (FCDB)
- Sampling and food analysis methods for FCDBs during recent years
- Role of analyzed nutrient composition in the Nordic FCDBs
- New data sources that may be used to improve the quality of the Nordic FCDBs
- How Open food information and nutrient composition data may feed to new innovations and applications?  
(e.g. sensor technology and wearable device development)
- How are the Nordic FCDBs used by today and how could the use be further facilitated for new user groups by new Internet applications



# MINTEL evaluation

**MINTEL GNPD**  
GLOBAL NEW PRODUCTS:  
TRACKED, ANALYZED, EXPLAINED.

<http://www.mintel.com/global-new-products-database>

**Case: Foods with the  
Finnish Heart Symbol**



# Nordic Food Composition for Labelling (NordCoLa) 2018-2019

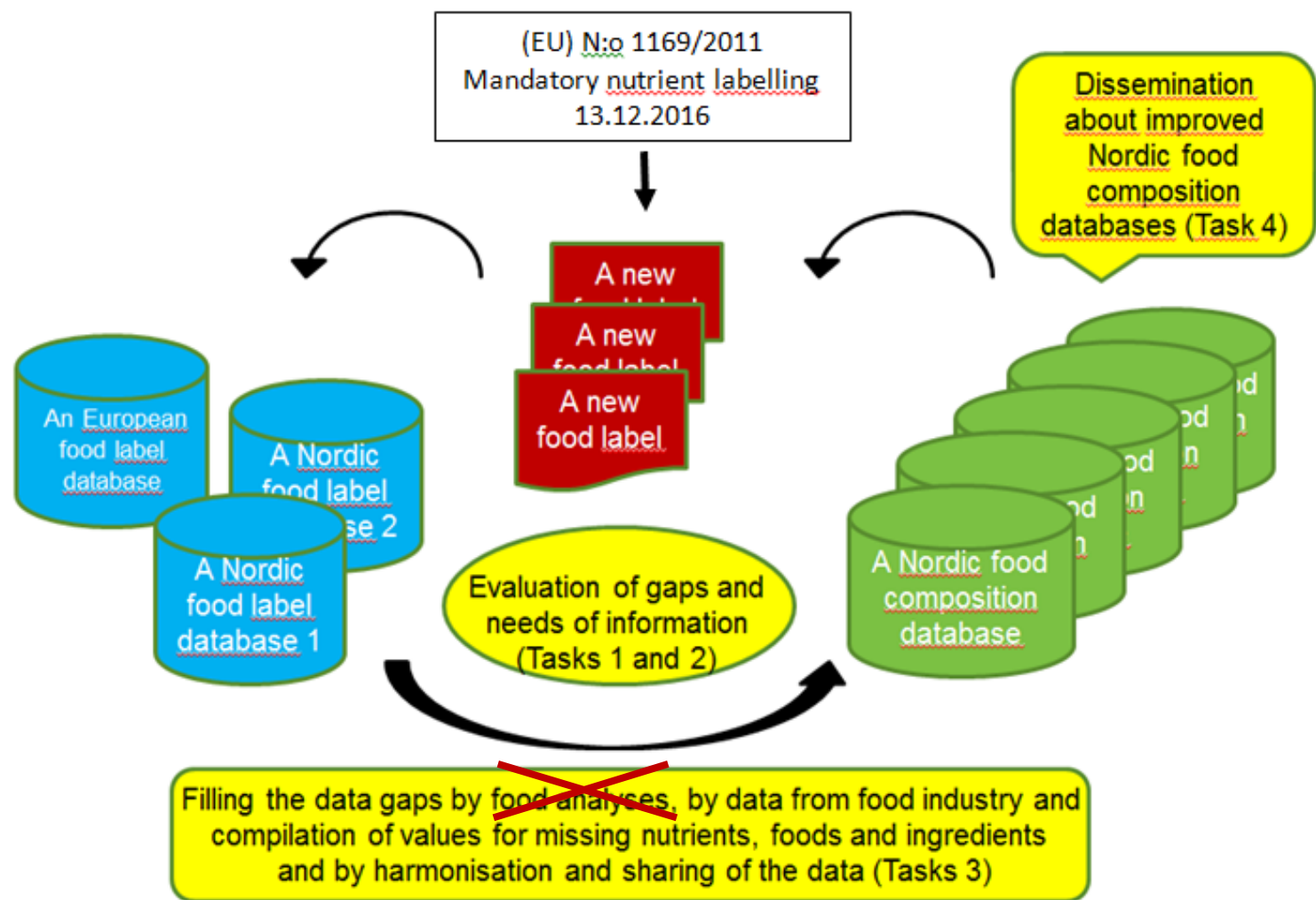


Figure 1. The tasks of the Nordic Food Composition for Labelling (NordCoLa) project.

(Valsta and the NFAN, 2016)



# Summary and future perspectives

- Long history of Nordic collaboration in food consumption databases (NORFOODS).
- Evident synergies in Nordic food composition database work also in the future.
- Urgent need to assure good quality composition databases.
- Recently, the Nordic Food Analysis Network has served to get the best out of the limited resources.
- The Nordic collaboration continues.
- Proposed to concentrate at least first to harmonise Nordic food consumption data instead of aiming to a common food composition database.
- “Fostering the quality and use of Nordic food composition data” and the “NordCola” projects ongoing.
- The future is open!



# Coordinator of a networking project



## Nordic collaboration at its best



# Acknowledgements

- Helena Pastell
- Heikki Pakkala
- Heli Reinivuo
- Jenna Rautanen
- Suvi Virtanen
- The NFAN Network



# Thank you! Questions?



[liisa.valsta@thl.fi](mailto:liisa.valsta@thl.fi)  
@LiisaValsta

