
NORFOODS 2002

Nordic Food Data on the Internet

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1 Preface

NORFOODS is a project group under the Nordic working group on food and nutrition within the official Nordic co-operation concerning foods.

The goals of the projects are to co-ordinate and render more effective the work on Nordic food composition data, database systems and analyses of nutrients. NORFOODS started its activities in 1982 and proposals/recommendations, decisions and/or agreements have been made on a long range of matters in the food composition area, e.g. food classification, foods, energy calculations, nutrients, nutrient values, references, dishes/recipes, food composition data systems, collaboration with other Nordic working groups, European and international organisations. Norfoods is the oldest existing and functional working group with regard to food composition data.

The Nordic Council of Ministers has granted support for a common Nordic project on food data publishing on the Internet. The project did start in the summer of 2002 and was finished in 2004.

The project was administered by [Tue Christensen](#) and [Anders Møller](#), formerly Danish Veterinary and Food Administration, now Danish Institute for Food and Veterinary Research.

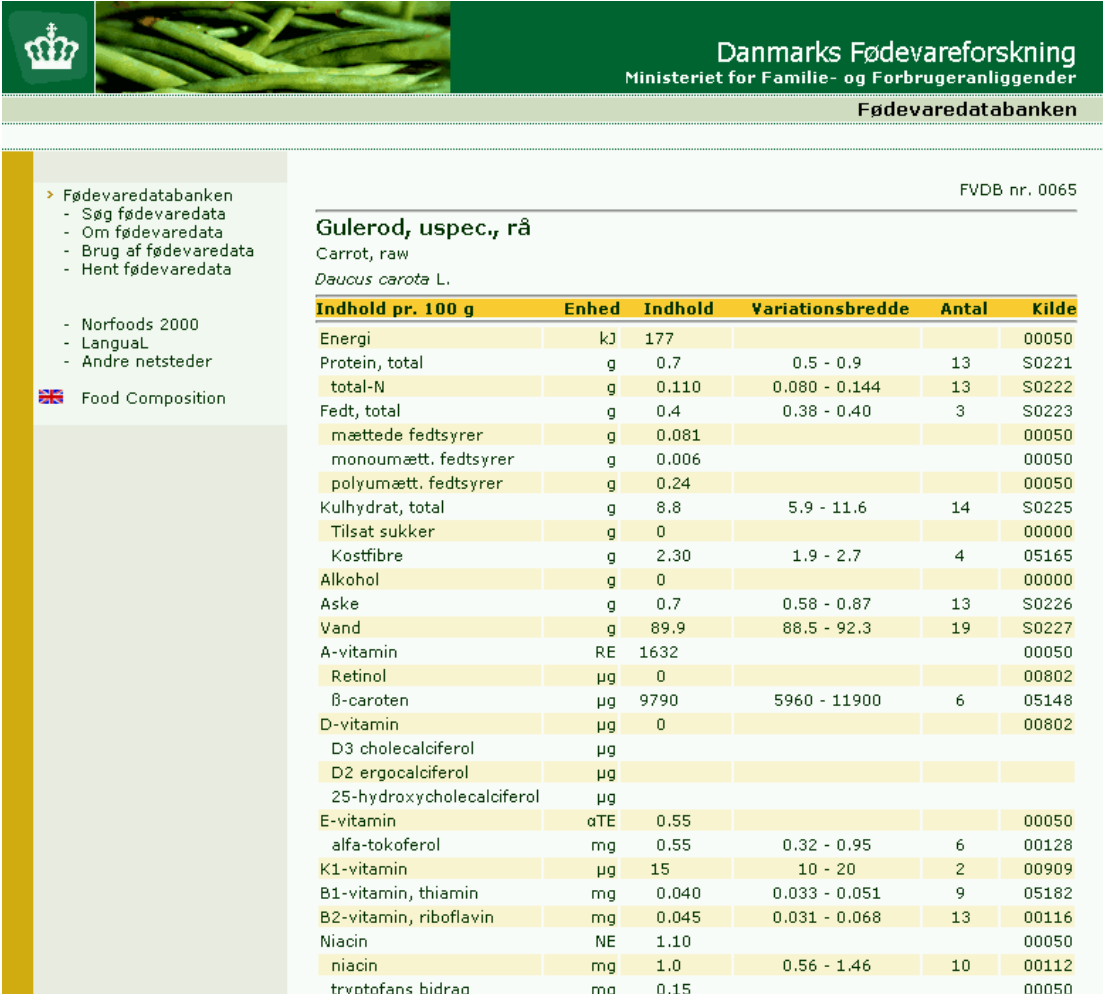
1.1 Participants in the project group

Country	Institution	Person
Denmark	Danmarks Fødevareforskning	Anders Møller Tue Christensen
Finland	Kansanterveyslaitos	Heli Reinivuo
Iceland	Mannedlisráð IceTec	Laufey Steingrimsdóttir Ólafur Reykdal
Norway	Sosial- og helsedirektoratet	Arnhild Haga Rimestad Kari Sygnestveit
Sweden	Livsmedelsverket	Ia Torelm Marianne Arnemo

2 Existing websites and their technology

2.1 Denmark

The Danish Food Composition Databank can be found at <http://www.foodcomp.dk>. This site is presently ASP-based and uses MS Access for storing data. The site exists in a Danish and an English version. The current version has 824 foods and covers about 50 components. The data are available for viewing and for download (proprietary file transfer format (semi-tagged), MS Access database and Excel spreadsheet). The nutrient data were last updated in 2003.



FVDB nr. 0065

Gulerod, uspec., rå
Carrot, raw
Daucus carota L.

Indhold pr. 100 g	Enhed	Indhold	Variationsbredde	Antal	Kilde
Energi	kJ	177			00050
Protein, total	g	0.7	0.5 - 0.9	13	S0221
total-N	g	0.110	0.080 - 0.144	13	S0222
Fedt, total	g	0.4	0.38 - 0.40	3	S0223
mættede fedtsyrer	g	0.081			00050
monoumætt. fedtsyrer	g	0.006			00050
polyumætt. fedtsyrer	g	0.24			00050
Kulhydrat, total	g	8.8	5.9 - 11.6	14	S0225
Tilsat sukker	g	0			00000
Kostfibre	g	2.30	1.9 - 2.7	4	05165
Alkohol	g	0			00000
Aske	g	0.7	0.58 - 0.87	13	S0226
Vand	g	89.9	88.5 - 92.3	19	S0227
A-vitamin	RE	1632			00050
Retinol	µg	0			00802
β-caroten	µg	9790	5960 - 11900	6	05148
D-vitamin	µg	0			00802
D3 cholecalciferol	µg				
D2 ergocalciferol	µg				
25-hydroxycholecalciferol	µg				
E-vitamin	αTE	0.55			00050
alfa-tokoferol	mg	0.55	0.32 - 0.95	6	00128
K1-vitamin	µg	15	10 - 20	2	00909
B1-vitamin, thiamin	mg	0.040	0.033 - 0.051	9	05182
B2-vitamin, riboflavin	mg	0.045	0.031 - 0.068	13	00116
Niacin	NE	1.10			00050
niacin	mg	1.0	0.56 - 1.46	10	00112
tryptofans bidrag	mg	0.15			00050

Danish Institute for Food and Veterinary Research administers the food databank. The site was updated primo 2005.

2.2 Finland

The Finnish Food Composition databank can be reached at <http://www.kti.fi/fineli/>. Most of the information presented on Fineli[®] website is in Finnish with the possibility of switching Finnish food names to English. There are plans to release a full English version of Fineli[®] in future, but directions in English for searching the database are available now.

The Finnish Food Composition Databank is based on the national food composition database, Fineli[®], which was established at the KTL in Nutrition unit in 1984. The whole database contains information for 290 nutrient factors and over 2500 foods of which half is mixed dishes. On the web site there are 39 nutrient factors and 1633 foods available. The nutrient values on the web site have been last updated in 2001. Technically the website is build with static web pages but with dynamic search shell

Fineli

Kansanterveyslaitos
Folkhälsöinstitutet
National Public Health Institute

FINELI[®]

► Esittely
► In English

► Haku
► Elintarvikkeet
► Raaka-aineet ryhmittäin
► Ruokalajit ryhmittäin
► Ravintotekijät
► Ravintoarvot ryhmittäin
► Saanti-suositukset
► Kirjallisuus-viitteet

► Ohjeita
► FAQ
► Palaute

► Palvelu-hinnasto

► Ravitsemus

Porkkana, kuivattu

Elintarvikkeen numero: 302
Englanninkielinen nimi: Carrot
Latinalainen nimi: *Daucus carota*
Valmistustapa: kuivattu
Elintarvikkeen tyyppi: [ruoka-aine](#)
Ruoka-aineryhmä: [juurekset](#)

Ravintokoostumus / 100 g

Keskimääräiset ravintoarvot 100 grammassa elintarviketta.

Ravintotekijä	Keskipitoisuus	Yksikkö	Tietolähde	Viite no.
Peruskoostumus				
Energia (kJ)	964.6	kJ	SUM	
Energia (kcal)	231.5	kcal	SUM	
Proteiinit	5.5	g	SUM	
Hiilihydraatti, imeytyvä	45.8	g	SUM	
Kokonaisrasva	1.6	g	RTL	
Alkoholi	0.0	g	RTL	
Rasvat				
Rasvahapot TAG-ekv.	1.4	g	RECI	
Rasvahapot yhteensä	1.4	g	RECI	
Tyydyttyneet rasvahapot	0.3	g	RECI	
Yksittäistydyttymättömät rasvahapot	<0.1	g	RECI	
Monitydyttymättömät rasvahapot	1.0	g	RECI	
Linolihappo	927.7	mg	RECI	

Copyright:
Kansanterveyslaitos,
ravitsemusyksikkö,
1999-2003.

The food databank is administered by KTL (Kansanterveyslaitos, National Public Health Institute). The Finnish web site was updated in the autumn of 2004.

2.3 Iceland

The Icelandic Food Composition Tables are available as PDF-files at the site of the Public Health Institute of Iceland at <http://www.lydheilsustod.is/fraedsla/fraedsluefni/matur-mataramedi-holdafar/nr/265>.

Data for 20 components in about 700 foods are included. All text is presented in Icelandic. An Excel file with English and Icelandic food names together with data is available on request. The work on the Icelandic Food Composition Database is overseen by a steering committee with members from different sectors of the society. The work is carried out at the food science department of IceTec, the Technological Institute of Iceland in cooperation with the Public Health Institute.

The Icelandic Food Composition Tables can also be reached at the mirror site of Matra at IceTec at <http://www.manneldi.is/ht/E/alfa.html>.

2.4 Norway

Norway has no official food databank available on the Internet. Printed tables are available from publisher 'Gyldendal' Den store matvaretabelen, (ISBN82-05-28500-4).

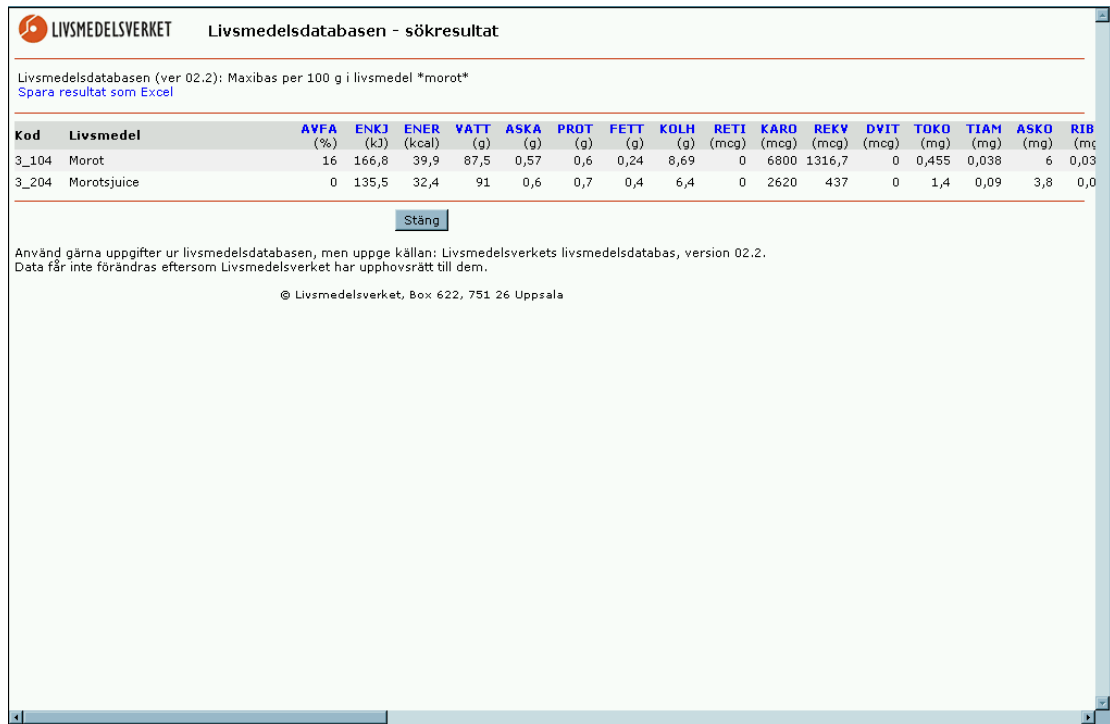
2.5 Sweden

The Swedish Food Composition can be reached at:

<http://www.slv.se/ldb>

The Swedish food composition tables are presented to the users in different parameter modes: Minibas, Maxibas, Fat-soluble vitamins, water-soluble vitamins, minerals,. It has a range of search facilities (simple & complex), allowing for display of ranked lists. The display will be a matrix-list and single food is not supported (unless only one hit during searches is achieved).

This site is ASP-based and uses MS SQLServer for storing data.



LIVSMEDELSVERKET Livsmedelsdatabasen - sökresultat

Livsmedelsdatabasen (ver 02.2): Maxibas per 100 g i livsmedel *morot*
[Spara resultat som Excel](#)

Kod	Livsmedel	AVFA (%)	ENKJ (kJ)	ENER (kcal)	VATT (g)	ASKA (g)	PROT (g)	FETT (g)	KOLH (g)	RETI (mcg)	KARO (mcg)	REKV (mcg)	DVIT (mcg)	TOKO (mg)	TIAM (mg)	ASKO (mg)	RIB (mg)
3_104	Morot	16	166,8	39,9	87,5	0,57	0,6	0,24	8,69	0	6800	1316,7	0	0,455	0,038	6	0,03
3_204	Morotsjuice	0	135,5	32,4	91	0,6	0,7	0,4	6,4	0	2620	437	0	1,4	0,09	3,8	0,0

[Stäng](#)

Använd gärna uppgifter ur livsmedelsdatabasen, men uppge källan: Livsmedelsverkets livsmedelsdatabas, version 02.2.
Data får inte förändras eftersom Livsmedelsverket har upphovsrätt till dem.

© Livsmedelsverket, Box 622, 751 26 Uppsala

All data from a query can be saved as an excel-file.

2.6 Regional data

2.6.1 Facts about Fish


The [Facts about Fish](http://www.norden.org/faktaof/index.html) site presents data and names for fish in the Nordic region. It uses common HTML technology and provides no search interface. It can be found at <http://www.norden.org/faktaof/index.html>

[Gå til startside](#) [Gå til ordbog](#) [Gå til billedopstilling](#) [Gå til Fakta om fisk \(på dansk\)](#)

Mørksej

Pollachius virens - Familie: Gadidae

FÆ: Upsi
IS: Ufsi
NO: Sei
SE: Sej, gråsej
FI: Seiti
D: Seelachs
ENG: Saithe
FR: Lieu noir



Mørksej kendes også under navnene gråsej eller bare sej. Sejen er meget glubsk og søger ofte ind til kysten efter føde. Fiskerne kalder fisken for mørksej i modsætning til lubben, der kaldes lyssej.


Kendetegn

Sejen er den mørkeste af sine artsfæller i torskefamilien. Den har en blåsort ryg og en næsten lige, lys sidelinie. Skægtråden mangler - eller er ganske lille - og den har underbid. Gattet er placeret under den bagerste del har en blåsort ryg og en næsten lige, lys sidelinie. Skægtråden mangler - eller er ganske lille - og den har underbid. Gattet er placeret under den bagerste del af den første rygfinne. Kødet er en smule mørkere og blødere end torskens.

Størrelse

Mindste fangstmaal er 40 cm. Sejen kan blive op til 130 cm, og den danske lystfiskerrekord fra 1995 er på 17 kg.

Levested



Sejen lever i åbent hav. Den vandrer langt omkring i stimer - ofte for at jage sild.

Udbredelse

Føde


Den lever af småfisk, fiskeyngel samt krebsdyr, som effektivt - filtreres fra vandet ved hjælp af et veludviklet gællegitter.

Kønsmodning


Fangstperiode

Sejen må fiskes hele året.

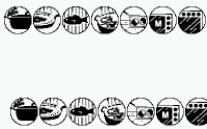
Fangstmetoder



Udnyttelse




Tilberedning



Næringsværdi pr 100 g

Energi 339 kJ
Protein 19,3 g
Kulhydrat 0,0 g
Fedt 0,3 g



Month	Catch (tons)
Jan	200
Feb	300
Mar	350
Apr	380
Maj	400
Juni	420
Juli	450
Aug	480
Sept	500
Ok	550
Nov	500
Dec	100

Sej/mørksej/gråsej

Danske fangster i 1995: 4.395 tons.

2.6.2 Farovian Fish List

The Faroese Fisheries Laboratory (Fiskirannsóknarstovan, www.frs.fo) maintains a list of fish names in Farovian, Danish, Dutch, English, Finnish, French, German, Italian, Japanese, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, as well as scientific names. The Farovian fish list's search page can be reached at

<http://www.frs.fo/get.asp?qid=f33B8EE22-5017-4E49-B0D4-66FC5E417D81>

and the full list of fish names is available at

<http://www.frs.fo/fish.asp?LangId=0>

Screen shot from The Farovian fish list:

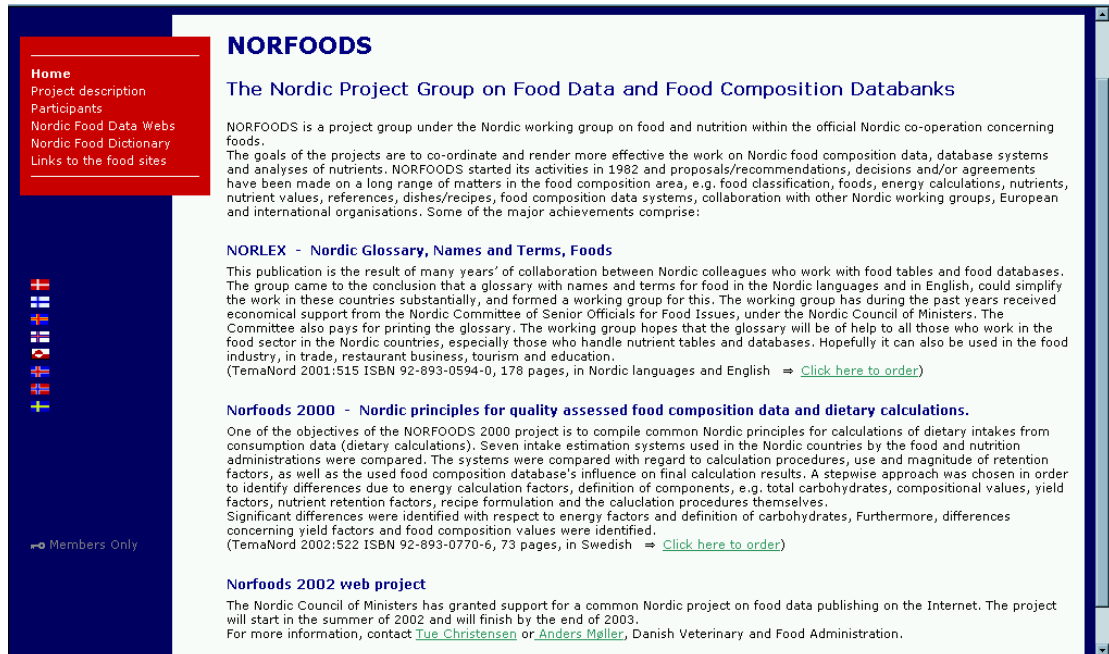
The screenshot shows a web browser window displaying the Fiskirannsóknarstovan (Faroese Fisheries Laboratory) website. The page title is "FISKIRANNSÓKNARSTOVAN FAROESE FISHERIES LABORATORY". The main content area is titled "Allan listan" and contains a list of fish names in four columns, representing different languages: Faroese, Danish, English, and Icelandic. The list includes scientific names and common names for various fish species.

Faroese	Danish	English	Icelandic
Merluzy	European sculpin	Locha	Rottutrónur
Nórdlig silvertorsk	European sturgeon	Locha blancha	Roltzunge
Aal	European whitefish	Loche	Roucou
Aal	Europeisk ners	Lochet	Rouge
Aal	Europeisk star	Lodd	Rougeot gris
Aaltorauku	Europeisk. mochoholov.	Lodda	Rouget
Aansaliq	sobacka	Lodde	Rough dab
Áarsil	Europeisk. mochoholov.	Lodde	Rough dog
Abadejo	sobacka	Lodde	Rough fish
Abadejo	Eurpoghattur	Lodde	Rough flasper
Abadejo de Alaska	pelicanoides	Lohall	Rough pomfret
Abadiao	Eurhymus alletteratus	Loika	Rough pomfret
Abadiao	Eurhymus gurnardus	Loika	Rough sape
Aðrabolo de bajura	Evl rei	Loika	Roughhead grenadier
Abarbada	Evropeskaja riapuhka	Lodhasild	Roughnose grenadier
Abborrkilling	Evropeskajaya rechnaya mingsa	Lodhusild	Roughskin skate
Abbot	Evropeskajaya ryapushka	Loðsild	Rou
Abshoya	Evropeskajaya chimera	Loðsilgur	Roumb
Abissa/ny/likod	Evropeskajaya mikina	Lógvasikka	Roumbou
Abla	Evropeskaj alosa	Lógví	Round ray
Ablette	Evropeskaj krjukkorogji	Lóhi	Roundnose grenadier
Abrotea	Evropeskaj krjukkorogji	Lóhi	Rouquét
Abrotea	byok	Lóhsill	Rousette de Madère
Abrotea branca	Evropeskaj krjukkorogji	Lóhi	Rousette
Abrotea-da-novazelandia	byok	Lóhi	Rousette à grandes taches
Abrotea-da-pedra	Evropeskaj lparis	Lója	Rousette d'Islande
Abrotia	Evropeskaj osotr	Laje	Rouset
Abrotia de Alto	Evropeskaj rechnoj ugor	Loligo forbesi	Rouvetos
Aburakunozame	Evropeskaj rechnoj ugo'r	Lom	Rovello
Abura-bunozame	Evropeskaj sardina	Lomle	Rowan
Acanthocottus bubalis	Evropeskaj lischia	Lompe	Roye
Acanthocottus lilleborgi	Evropeskaj lischia	Lompe	Røye
Acanthocottus scorpius	Exocoet atlantique	Lompénie tacheté	Røyr
Acantholabre	Exocoet volante	Lompe	Roz solomús
Acantholabrus palloni	Exocoet	Lompo	Roze zalm
Accuga	Exocoetus voltans	Lomre	Rozet
Acedia	Eyrihri/Enriá	Long fin tunny	Rozpor a. shieck
Acekeru	Eyrihasild	Long finned abacore	Rritliq
Acerena	Fabricius lángrtjart	Long nez	Ruban
Acerena	Fabricius ringlug	Long rough dab	Rubio
Acipenser sturio	Fabricius sorthaj	Long spined bullhead	Rubio
Adder	Fächerfisch	Long spined sea	Rubica
Aððersenaald	Færeyjáhafur	scorpion	Rubios
Aððerfish	Fagurserkur	Longa	Ruda
Ægisangi	Fagurserkur	Longe	Rudderfish
Aellet	Faix trisle maille	Longear eelpout	Ruffe
Ælabogasl	Falsa llanda	Longear eelpout	Ruffe
African rainbow wrasse	Falscher Bonito	Longfin smooth-head	Ruige rog
Agassiz glathovedfisk	False abacore	Longfin snailfish	Rujanahven

2.7 Norfoods web resource

The Norfoods website provides an overview of the work of this workgroup and hosts a special members-only section accessible only for the participants of the project.

Screen shot from the public website:



NORFOODS

The Nordic Project Group on Food Data and Food Composition Databanks

NORFOODS is a project group under the Nordic working group on food and nutrition within the official Nordic co-operation concerning foods.

The goals of the projects are to co-ordinate and render more effective the work on Nordic food composition data, database systems and analyses of nutrients. NORFOODS started its activities in 1982 and proposals/recommendations, decisions and/or agreements have been made on a long range of matters in the food composition area, e.g. food classification, foods, energy calculations, nutrients, nutrient values, references, dishes/recipes, food composition data systems, collaboration with other Nordic working groups, European and international organisations. Some of the major achievements comprise:

NORLEX - Nordic Glossary, Names and Terms, Foods

This publication is the result of many years' of collaboration between Nordic colleagues who work with food tables and food databases. The group came to the conclusion that a glossary with names and terms for food in the Nordic languages and in English, could simplify the work in these countries substantially, and formed a working group for this. The working group has during the past years received economical support from the Nordic Committee of Senior Officials for Food Issues, under the Nordic Council of Ministers. The Committee also pays for printing the glossary. The working group hopes that the glossary will be of help to all those who work in the food sector in the Nordic countries, especially those who handle nutrient tables and databases. Hopefully it can also be used in the food industry, in trade, restaurant business, tourism and education.
(TemaNord 2001:515 ISBN 92-893-0594-0, 178 pages, in Nordic languages and English ⇒ [Click here to order](#))

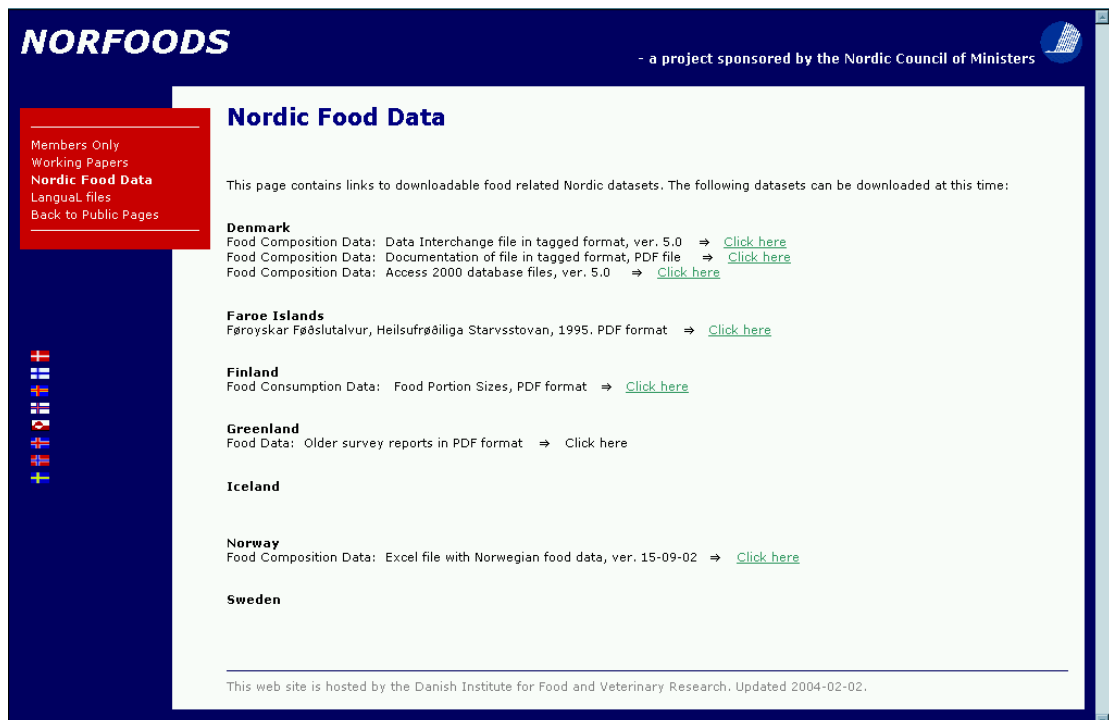
Norfoods 2000 - Nordic principles for quality assessed food composition data and dietary calculations.

One of the objectives of the NORFOODS 2000 project is to compile common Nordic principles for calculations of dietary intakes from consumption data (dietary calculations). Seven intake estimation systems used in the Nordic countries by the food and nutrition administrations were compared. The systems were compared with regard to calculation procedures, use and magnitude of retention factors, as well as the used food composition database's influence on final calculation results. A stepwise approach was chosen in order to identify differences due to energy calculation factors, definition of components, e.g. total carbohydrates, compositional values, yield factors, nutrient retention factors, recipe formulation and the calculation procedures themselves. Significant differences were identified with respect to energy factors and definition of carbohydrates. Furthermore, differences concerning yield factors and food composition values were identified.
(TemaNord 2002:522 ISBN 92-893-0770-6, 73 pages, in Swedish ⇒ [Click here to order](#))

Norfoods 2002 web project

The Nordic Council of Ministers has granted support for a common Nordic project on food data publishing on the Internet. The project will start in the summer of 2002 and will finish by the end of 2003.
For more information, contact [Tue Christensen](#) or [Anders Møller](#), Danish Veterinary and Food Administration.

Screen shot from 'members only'-section



NORFOODS - a project sponsored by the Nordic Council of Ministers

Nordic Food Data

This page contains links to downloadable food related Nordic datasets. The following datasets can be downloaded at this time:

Denmark
Food Composition Data: Data Interchange file in tagged format, ver. 5.0 ⇒ [Click here](#)
Food Composition Data: Documentation of file in tagged format, PDF file ⇒ [Click here](#)
Food Composition Data: Access 2000 database files, ver. 5.0 ⇒ [Click here](#)

Faroe Islands
Føroyskar Føðslutalvur, Heilsufrøðiliga Starvsstovan, 1995. PDF format ⇒ [Click here](#)

Finland
Food Consumption Data: Food Portion Sizes, PDF format ⇒ [Click here](#)

Greenland
Food Data: Older survey reports in PDF format ⇒ [Click here](#)

Iceland

Norway
Food Composition Data: Excel file with Norwegian food data, ver. 15-09-02 ⇒ [Click here](#)

Sweden

This web site is hosted by the Danish Institute for Food and Veterinary Research. Updated 2004-02-02.

The Members Only pages contain information for the members and friends of the NORFOODS working group. On these pages members of the working group will find

- historical documents
- minutes from NORFOODS meetings
- working documents of the working group
- data files with food data from the Nordic countries
- special coding/indexing of food data

3 Future developments

3.1 Common database search interfaces

In order to exchange information reliably and more freely, tools must be provided that gives a common search interface for the current and upcoming food databases. It is especially important that the users can identify the foods to such a degree that they can decide whether to use the provided data or not. That goes for the situation where the users will compare national data with regional data as well as the situation where the user will obtain regional data for a table.

Today, three obvious ways for a common search interface are available: 'Nordic Food Dictionary', 'LanguaL' and free text search.

3.1.1 Nordic Food Dictionary

A database adaptation of the Nordic Food Dictionary is can be reached at <http://www.foodcomp.dk/norfoods>.

The database is based on the NORLEX - Nordic Glossary, Names and Terms, Foods ((TemaNord 2001:515) publication, an online dictionary of names and terms for food in the Nordic languages and in English has been implemented.

This version is only the first attempt to publish the NORFOODS data on the Internet. Future implementations include linking the food dictionary with the Nordic food composition databases.

The food dictionary could be searched in different ways. Currently a user can search all languages by name or part of a name. Search via food group and via specific language is planned.

The Nordic Food Dictionary provides an excellent overview of food names used in the Nordic countries, but is not entirely matching the existing Nordic food data resources and lacks links to the food databases at the moment.

3.1.2 LanguaL

LanguaL stands for "Langua aLimentaria" or "language of food". It is an automated method for describing, capturing and retrieving data about food. The work on LanguaL was started in the late 1970's by the Center for Food Safety and Applied Nutrition (CFSAN) of the United States Food and Drug Administration as an ongoing co-operative effort of specialists in food technology, information science and nutrition.

Since then, LanguaL has been developed in collaboration with the US National Cancer Institute (NCI), and, more recently, its European partners, notably in France, Denmark, Switzerland and Hungary. Since 1996, the European LanguaL Technical Committee has administered the thesaurus.

The thesaurus provides a standardised language for describing foods, specifically for classifying food products for information retrieval. LanguaL is based on the concept that:

- Any food (or food product) can be systematically described by a combination of characteristics
- These characteristics can be categorised into viewpoints and coded for computer processing
- The resulting viewpoint/characteristic codes can be used to retrieve data about the food from external databases

LanguaL is a multilingual thesaural system using faceted classification. Each food is described by a set of standard, controlled terms chosen from facets characteristic of the nutritional and/or hygienic quality of a food, as for example the biological origin, the methods of cooking and conservation, and technological treatments.

One problem concerning multilingual thesauri is the multiplicity of natural languages: corresponding terms of different languages are not always semantically equivalent. It was chosen to render LanguaL language-independent, to be used in the USA and Europe for numeric data banks on food composition (nutrients and contaminants), food consumption and legislation. Each descriptor is identified by a unique code pointing to equivalent terms in different languages (e.g. Danish, English, Finnish, French, Spanish and Hungarian).

LanguaL thus facilitates links to many different food data banks and contributes to coherent data exchange. LanguaL is the only generally recognised method in common use for describing, capturing and retrieving data about food, adapted to computerised national and international food composition and consumption databanks.

Most of the Nordic tables have, or are in the process of creating, LanguaL encoding of the food-items. As this work progress it will provide basis for a valuable search interface for the regional tables.

3.1.3 Free text searching

Free text search is done effectively from many of the mayor search-engines, e.g. Google or AltaVista. Search into the databases will be available if the database provides a link that gives the food items contained in the database. In order to make free text search more efficient user, it is however necessary to create an enriched interface providing more information that just food names, especially links to the foods in the databases.

3.2 How to get specific information from other databases

3.2.1 Requirements of the web sites

In order for an external user or web-application to gain access to data, it is necessary that

- The data is organised in a database
- The data is accessible directly by a link
- The user/application can gain access to a list stating food identification and link to food data

3.2.2 XML

As Internet technology is maturing, the XML standard has emerged. This standard provides the opportunity to create data interfaces suitable for practical any purpose. The standard is widely accepted and has similarities to the existing food data interchange format developed by INFOODS.

Currently a DTD (Document Type Definition, Schema specification method for SGML and XML documents) and a transport package has proven its worth in the Eastern European countries for the "Alimenta" software. A similar approach should be tried for the Nordic countries, as we should either adopt or adapt this solution.

The DTD is developed by FloraFood¹ and FAO and looks this way:

```
<!-- Transport Package DTD -->
<!-- (c) FloraFood 2000 -->

<!ELEMENT FoodTransportPackage (Content)>
<!ATTLIST FoodTransportPackage
    Country NMTOKEN #REQUIRED
    CreationAuthor CDATA #REQUIRED
    CreationDate NMTOKEN #REQUIRED
    CreationReason CDATA #REQUIRED
    DTDVersion NMTOKEN #REQUIRED
    Name CDATA #REQUIRED
    Notice CDATA #REQUIRED
>
<!--Group of foods-->
<!ELEMENT Content (Food+)>
<!ELEMENT Food (FoodDescription, FoodParameters)>
<!ELEMENT FoodDescription (FoodName, FoodCode)>
<!ELEMENT FoodCode (#PCDATA)>
<!ATTLIST FoodCode
    System NMTOKEN #REQUIRED
>
<!ELEMENT FoodName (#PCDATA)>
<!ATTLIST FoodName
    Language NMTOKEN #REQUIRED
>
<!--Parameters for food-->
<!ELEMENT FoodParameters (FoodParameter+)>
<!ELEMENT FoodParameter (ParameterDescription, ParameterValue?)>
<!ELEMENT ParameterDescription (Name, Code)>
<!ELEMENT Code (#PCDATA)>
<!--Parameter code-->
<!ATTLIST Code
    System NMTOKEN #REQUIRED
>
<!ELEMENT Name (#PCDATA)>
<!--Parameter name-->
<!ATTLIST Name
    Language NMTOKEN #REQUIRED
>
<!--Average value, mininum, maximum, unit and food mass (grams) for pa-
rameter.-->
<!ELEMENT ParameterValue EMPTY>
<!ATTLIST ParameterValue
    Average NMTOKEN #REQUIRED
    FoodMassG NMTOKEN #REQUIRED
    Units CDATA #IMPLIED
    Minimum NMTOKEN #IMPLIED
    Maximum NMTOKEN #IMPLIED
>
```

¹ <http://www.florafood.com/>

An example of a transportpackage from "Alimenta" is shown below

```
<?xml version="1.0" ?>
<FoodTransportPackage Name="TransportPackage example" Country="Florida" Crea-
tionAuthor="Radovan Vargic" CreationDate="21.08.2001" CreationReason="Explain
structure of Transport package" Notice="Export from Alimenta" DTDVersion="0.99">
<Content>
<Food>
<FoodDescription>
<FoodName Language="EN">ORANGE JUICE</FoodName>
<FoodCode System="FRI-KP">6240007SK00000003004</FoodCode>
</FoodDescription>
<FoodParameters>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">COEFFICIENT OF EDIBLE PORTION</Name>
<Code System="FRI-KP">49999</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="1.000000"/>
</FoodParameter>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">CALCULATED DRY SUBSTANCE</Name>
<Code System="FRI-KP">50003</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="10.398330" Units="g"/>
</FoodParameter>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">WATER</Name>
<Code System="FRI-KP">50100</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="88.067630" Units="g"/>
</FoodParameter>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">TOTAL DRY SUBSTANCE</Name>
<Code System="FRI-KP">50200</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="11.959580" Units="g"/>
</FoodParameter>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">TOTAL PROTEIN</Name>
<Code System="FRI-KP">51000</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="0.571430" Units="g"/>
</FoodParameter>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">PLANT PROTEIN</Name>
<Code System="FRI-KP">51002</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="0.571430" Units="g"/>
</FoodParameter>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">GLYCINE</Name>
<Code System="FRI-KP">51201</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="0.005640" Units="g"/>
</FoodParameter>
<FoodParameter>
<ParameterDescription>
<Name Language="EN">ALANINE</Name>
<Code System="FRI-KP">51202</Code>
</ParameterDescription>
<ParameterValue FoodMassG="100.0" Average="0.009020" Units="g"/>
</FoodParameter>
</FoodParameters>
</Food>
</Content>
</FoodTransportPackage>
```

4 Conclusions

The discussions in the present project have shown that it is not necessarily an implementation of similar appearance of food composition databases on the Nordic national websites.

The initial search and comparison of data across databases can be achieved by using similar documented search criteria (internally documented for the participants in the project) as well as standardised food description schemes.

The discussions have also shown that more direct access to information such as plans for and results of new analytical projects would be of great benefit for the colleagues in the other Nordic countries. This issue can be dealt with in a specific page on the Members Only pages as a start, and if it turns out as a success with projects in all countries participating, information can be moved to the open pages of Norfoods.

A professional need for comparing data in more countries tables do however exist. Standardisation of data transport will be a step in the right direction in the process of enabling websites to display data according to current design specification of the particular website, aimed at the websites specific use of data and the websites users.

Guidelines/recommendations for what to be implemented in the data-handling systems in order to make data flow in a manner adequate for displaying /conveying food composition data is needed.

Collaboration among the Nordic countries in the field of food composition data and databases is essential for the food composition work in the Nordic countries. Several countries have clearly expressed that without the Nordic/international collaboration, it is extremely difficult for the countries themselves to maintain the needed national food composition database. Furthermore, it is essential that funding for at least meeting activities are available from either national or central source (NM) for the future development of food composition data and databases in the Nordic countries.

During the next five years, sources for funding of a trans-European databank-system will be available from the European Commission through the 6th Framework Programme. The EuroFIR (European Food Information Resource network) project is aimed at setting up standards for the management and interchange of data in food composition databases in Europe as well as setting up a system to provide means of management and interchange of food composition data.

Negotiations concerning funding of the EuroFIR this project is currently (June 2004) underway and the project is expected to start in the beginning of 2005.

The three Nordic countries, Denmark (DFVF), Finland (KTL) and Sweden (SLV), play a major role as work package leaders of more than half of the work packages in the project.

5 Appendix 1: Meeting in Reykjavík, Island 12-14 September 2002

5.1 Meeting place

IceTec
Technological Institute of Iceland
Keldnaholti
IS-112 Reykjavik

5.2 Final agenda

12 September 2002

13.30 Welcome, administrative matters and adoption of agenda
13.45 Presentation of participants
14.00 Presentation of food data on the Internet: current status, upcoming systems, future plans for each participating country in the following order (Sweden, Norway, Iceland, Finland, Denmark)
14.45 Coffee break
15.15 Continuation of "Presentation of food data on the Internet"
16.45 Departure for "Store Check"
17.00 "Store Check", visit to one of Reykjavík's larger supermarkets
18.00 Return to guesthouse

13 September 2002

09.15 Pick up of participants at guesthouse
09.30 Introduction to and discussion of the BALATON document "Recommendations for Publishing Food Composition Data on the Internet"

Discussion of possibilities for
 o Nordic cooperation on presenting data on internet
 o Common database/database structures
 o Means of data exchange
 o Common standard for data availability on internet
10.30 Coffee/tea break
11.00 Continuation of discussions
12.30 Lunch
13.30 Continuation of discussions
15.00 Coffee/tea break
15.30 Conclusions of discussions and future collaboration
16.30 End of meeting at IceTec

19.00 Dinner in Reykjavík centre

14 September 2002

09.00 Excursion for participants, destination dependent of weather and road conditions
20.00? Return from excursion

5.3 Participants

5.4 Meeting minutes

5.4.1 Welcome, administrative matters and adoption of agenda

Anders Møller who chaired the meeting bid all welcome and made an brief summary of the current situation of publishing food data on the internet and urged the participants to use the meeting to exchange ideas on how to work with food composition data on the internet in an intelligent way. Also the historic perspective of the genesis of the Balaton document and the work done in is trails were briefly mentioned.

IA Torelm (IT) suggested that the agenda should be extended with a discussion of the need for a Nordic group, which could help for rapid interchange of upcoming compounds in food. This was accepted and added for the Friday's discussions.

5.4.2 Presentation of participants

The participants made a brief presentation to each other, luckily revealing that the working group was people with relevant knowledge and working experience in the field of compiling and using food composition data.

Ólafur Reykdal (OR) made a short presentation of the IceTec institution and its working fields. OR works in the food science department (Matra) of IceTec, and OR made a good introduction to some of the topics in his working field inside and outside the food composition field, i.e. quality of lamb meat and contaminants of Icelandic foods.

5.4.3 Presentation of food data on the Internet: current status, upcoming systems, future plans for each participating country

5.4.3.1 Sweden

Marianne Arnemo (MA) made a presentation of the new version of the SLV web pages. The current design and setup was 7 august 2002. In the new setup there is a section for people working professionally with food, which will include the food composition table. The food composition table will be available on the Internet by December 2002. MA demonstrated upcoming features: Minibas, Maxibas, Fat-soluble vitamins, water-soluble vitamins, minerals, search facilities (simple & complex), Top 10 lists. The display will be matrix-list and single food is not supported.

Data source and English version will be upcoming features that are not included in the first release. Furthermore a dietary intake calculation system is considered.

5.4.3.2 Norway

Kari Sygnestveit (KS) informed that Norway don't have a food composition table on the web, but would like to have it in a near future, although no actual plans exists. There is no in-house knowledge on bringing data on the net. The printed version of the main food composition tables will be abandoned, but a smaller version of the food composition tables for educational use will still be in press.

5.4.3.3 Iceland

OR explained how the work with the Icelandic Food Composition Database (ÍSGEM) is carried out. Data compiling is carried out at the food science department of IceTec but programming is bought from private companies. Ministry of Health, government development funds and the Agricultural Research Institute have funded the work. The ÍSGEM food composition database features 1148 foods with up to 140 compounds. The format shows typical value, min, max, n and reference. Food composition tables will be published on the Internet in the future and printing of the tables will likely be kept to a minimum.

This data was also used for the “Matarvefurinn” Internet dietary calculation system presented on the last meeting. A new public health institute has been established in Iceland and this might influence the work on the food composition database. Food composition tables will be prepared in 2003 for the Internet and the tables might be printed later.

Points taken:

- Gap between expectations and available data
- Processed foods: Data lacking (except perhaps for proximates)
- Need for international databases

Ívar Gunnarson (IG) demonstrated the structure of ISGEM.

Sigurður (Siggi) Hjaltasson made a presentation of the ‘Matarvefurinn’ system, which can be reached at <http://www.matarvefurinn.is>.

This system is aimed to be a teaching aid for all levels in the school system but also to serve special interest groups. Technically it is a system that runs on a server, both database and nutritional software, and only a browser are necessary. The system allows for user registration as well as for guest logins. A registered user will have access to store own working data such as food registrations and recipes. The system features brand names and common portion sizes.

The system has been running for the whole 2002 with some revisions. Most activity on the system is seen during schooldays.

The system runs on MS-IIS server. Database is in Interbase; system is programmed in Delphi.

5.4.3.4 Finland

Heli Reinivuo (HR) presented the Finnish FCT. This site was one of the first European sites to have the FCT. The site was in previous versions only accessible in Finnish, but has now been extended with facilities that give information in English, allowing non-Finnish speaking to use the database. There is an introduction page in English, and foods are supplied with English names. Information for interpretation of compounds names is also available. Values are given as representative value in 100 g edible portion. Source and type of data is indicated. You are able to tell if data is aggregated, analytical or from a manufacturer. The foods can be shown as single foods or as matrix-list. The base I currently out-of-date, but no resources is available at the moment to do a new version.

Technically it is build with static database-pages but with a dynamic search shell.

5.4.3.5 Denmark

Anders Møller (AM) told that the current implementation of the Danish food composition was included in the Balaton-paper as an example of not-to-do. He demonstrated the flaws truly indicating the usefulness of the nice-looking tables. Then AM showed the upcoming Danish food composition table: The system will be with a dynamic search shell and will produce live tables directly from the database. There will be a single food representation, but some kinds of matrix-list are considered. The database is able to produce a ranked list for every compound, but this will need a makeover, as there is no portion-sizes on the foods, thus the list will be of limited use.

The site will have Danish and English as entry, and data will be presented according to the entered language.

5.4.4 “Store Check”, visit to one of Reykjavik’s larger supermarkets

The participants visited “Hagkaup” and had an impression of how and which foods are marketed in Iceland.

5.4.5 Introduction to and discussion of the BALATON document “Recommendations for Publishing Food Composition Data on the Internet”

AM introduced by stating that the Balaton-document was made in a hurry in 1999 just as food composition tables began being available on the Internet. Much water has run in the sea since, so now many food composition resources have appeared on the Internet. AM showed that at list of such resources displayed on the www.languaL.org site. Also here a link for the Norfoods 2002 project (this project) can be found. Some of the more original sites listed unfortunately is not running at this moment: especially the LanguaL search machine that once ran in Switzerland is missing. Not all listed resources are for free. AM pointed out that much of the day’s session will be loosely structured for a brainstorming, and that the Balaton-paper was a mean of initiate the participants to the topics for the day.

From the discussions following stands was taken:

5.4.5.1 The Balaton document roughly divides the data resources into 4 kinds

Simple publishing: data are published as in printed version, downloadable or not, in an interchange format (e.g., HTML, PDF). The published data are presented in a fixed format, either for a single food or for several foods (food/component matrix presentation).

Single food presentation: data are presented for only one food at a time. This type of presentation allows detail to be given for each value (e.g., minimum and maximum values) where such information is needed.

Matrix presentation: data are presented for several foods at a time in a food/component matrix, i.e. a spreadsheet format. This type of presentation allows comparison of several foods on the same screen.

Online database query: data are held in an online database and can be queried directly from the user terminal. The result of the query is dependent on the query.

To this might be added a ‘pro’ interchange format, catering for all the information needed by clever food composition compilers. A need for this was supported by the meeting, and a discussion of appropriate formats evolved. It seemed that a practical way to convey data interchange might be to use the interchange format that the EPIC-centres use. This is not just a

'pipe-dream' format, but actually in use. It is a working subset for the 'Eurofoods recommendations for food composition database management and data interchange'.

Also it appeared at the meeting, that national and international standards and regulations on how governmental websites should operate was an aspect that was not covered in the Balaton-project. In Sweden a website should go with the recommendations in 'Rekommandationer och råd för 24-timmarsmyndighetens webbplats' and similar recommendations are in charge in Denmark: <http://www2.si.dk/netsteder/publ/>.

5.4.6 Discussion of possibilities for

- Nordic cooperation on presenting data on Internet
- Common database/database structures
- Means of data exchange
- Common standard for data availability on Internet

It was discussed if it is a feasible task to look similar when we are using different techniques.

The meeting agreed on that we have 3 tasks to deal with:

- a) Simple data interchange with files
- b) Data package
- c) Database query

The meeting spent some time looking into the EPIC database layout and it was agreed to use this format either directly as the access-files or as delimited files holding the individual tables for the interchange. Sweden, Norway and Denmark can directly distribute in EPIC-format, Finland will have to use delimited files.

An issue is the legal and copyright problems. Also it must be stated if the data is freely available under special conditions, such as for database building. Also the need of a general disclaimer was briefly mentioned.

When an understanding is established it can be worked out what can be exchanged and how it can be exchanged.

It was suggested to use the term data resources instead of food composition data.

It was agreed that there was a need for a common exchange of data, and that a website for this should be setup. The database should be with password (limited access) and should be hidden for search engines, in order not to have public access. Also the website should have no public links pointing at it from any of our official websites. The data resource should be common for database compilers throughout the Nordic countries.

It was discussed which constraints that is on use of data. For non-commercial use the food data resources generally may be used freely if data is referenced properly and the source is acknowledged.

Other kind of data resources that might be helpful when accessing food composition data is glossaries. As Nordisk Ministerråd already has supported 'Nordisk Ordlista' it was agreed that work should be done in order to get this on the Internet. Nordisk Ministerråd also hosts a fish database, www.norden.org/faktaof.

Portion sizes for foods also need to be exchanged. An article was published (Andersen et al. "Typiske vægte for madvarer", Scand.J.Nutrition/Näringsforskning vol 40 (4) Suppl no 32: S129-S152, 1996) and a Nordic project has been carried out: "Portionsstorlekar, Nordiska

standardportioner av mat og livsmedel, TemaNord 1998:554, Nordisk Ministerråd). Further work is needed in order to be able to cover all foods present in the Nordic FCT. Finland has their portion sizes on the web as .pdf-file.:

(<http://www.ktl.fi/oppaita/ravo/ruokamittoja/ruokamittoja.pdf>)

Further work on exchanging data in Europe might be done in the framework6 suggested EuroFIR project (if funding will be available).

AM will provide example of how data can be accessed in standard ways using and URL and get/put calls.

5.4.7 Conclusions of discussions and future collaboration

There is apparently a need for a rapid data exchange group, which could exchange new data on compounds that gets interesting to know more about. IT will work on getting Eva-May Ohlander to do an application. Who will lead the project can be appointed when funding is in place. The project will probably run in 2004.

Time frame for this project is to end by December 2003. Next meeting will be in Oslo in the first half of 2003.

- We will establish a common data resource (CDR).
- Present data will be delivered to the CDR in the presently occurring format.
- DK will host and is responsible
- Epic format is still uncertain; more discussion is needed.
- No data format can be imposed, only suggested
- We need more discussion on web-layout and access to other database on the net
- IT-security is still an issue
- Legal issues is to be considered
- Nordisk Ministerråd will be asked about putting "Nordisk Ordlista" on the web
- Linking to food composition resources should be worked on
- Linking to other "authoritative" websites for food descriptions should be considered

5.4.8 Excursion for participants, destination dependent of weather and road conditions

The Icelandic nature proved an excellent frame for collegial discussions. We were introduced to how things are done or have been carried out in Iceland from historic past to present days. Numerous beautiful sites were visited (although not web-sites).

6 Appendix 2: Oslo meeting , June 12-13 2003

6.1 Meeting place

Sosial- og helsedirektoratet
Keysersgt. 13/15
Oslo

6.2 Final Agenda

Agreement on agenda

Minutes from last meeting

- any comments ?

Status report from participating countries

EuroFIR proposal, status

Follow up on last meeting's tasks

- NORFOODS web site
- Can we get access to each other's data layout-unformatted ?
- NORLEX
- LanguaL use for food description (DK, FI)

Poster at 5IFDBC in Washington D.C.

Final report

- Identification of needs for food composition data resources on the Internet, status and prospects
- Guidelines for access to Nordic food composition data
- NORLEX, implementation and linking to Nordic databases
- ????

Application for group working on bioactive substances (Ia Torelm)

Store Check in Oslo

Joint meeting with Norwegian food composition database group on Friday morning:

New Nordic nutrient recommendations 2004 (and EU Nutrition Labelling Directive):

- energy calculations unchanged in the new proposal, fibre still included
- vitamin A equivalent expression changed
- vitamin E equivalent expression changed

how will the recommendations be followed ?

Continuation and elaboration of value expression

(NORFOODS 2000 work done in report; TemaNord 2002:522, bilaga 1):

- vitamin D: biological assay or chemical assay, and which 25-OH vitamin D activity factors are used;
 - vitamin B1, thiamine expressed as thiamine hydrochloride or thiamine,
 - vitamin B2, riboflavin expressed as ?
 - vitamin B6, expressed as pyridoxine hydrochloride or ?
 - pantothenic acid expressed as calcium D-pantothenate ?
 - etc.
-
- **Information about Norwegian KBS software (Elin Bjørke Løken)**

6.3 Meeting minutes

6.3.1 Minutes from last meeting

No comments !

6.3.2 Status report from participating countries

Norway : (Kari Syggestveit) Not on the Internet with food composition data yet. Lack of funding is one of the main obstacles, especially as the funding for the database are going to be cut to the half amount of the present. Specifications for the site is in progress, but funding is not in place. This group work might help the Norwegians getting a site going.

Food database work is in the process of licitation (call for tender); several independent laboratories is working with data analysis.

Eight persons are currently working with the food composition database; but no one is working 100 % on the task.

'Gyldendal' publishes data as printed tables, but data is available on an XLS-sheet.

Iceland (Ólafur Reykdal) The database has been updated since last meeting in order to provide data for the new national dietary survey. This data is also provided for the Internet dietary survey () presented on the last meeting.

New national public health institute is coming up in Iceland, which may influence the work with the food composition tables. School tables will be available in the fall in printed form and the data will also be available on the Internet. Web-version of the tables has priority 1, printed tables priority 2.

Sweden (Ja Torelm/Marianne Arnemo) : The interest for printed version of the food composition tables has declined. The site has about 200 visitors/day; in the beginning of the year 2003 it was 400 visitors/day. People are pleased with the way the website presents the food composition table. English version of the food composition table is planned for the beginning of 2004. A survey ran for 2 months on the website, of 10400 visitors 40 did answer. The survey will be moved, so that it is displayed after users has made choices on the web-site in order to attract more attention.

Scientific names are planned for the database; but the system is scrutinized in order to identify which functions it needs to have and which functions is nice to have.

The Swedish website with food composition data had experienced update problems between redundant data systems. Work is in progress for a more secure system.

A survey on children is conducted in order to identify in-between meals, especially which food items is consumed: candies, rissi-frutti, yoghurt, yoghurt derivatives and so on.

The food composition database was put on ice 2002; much work has been done to preserve the work, but nothing has happened yet. A grant of 1,5 million SKR from 'Statens folkehälsöinstitut' has saved the work for 2003. A new situation might arise when they get a new director general.

The cost of publishing the food composition tables is estimated to 200.000 SKR.

Denmark (Anders Møller) The work in Denmark is influenced by the on-going reorganisation, where research is to be separated from the administration. The fifth edition of the food composition tables has been published on the Internet. A yearly update is planned, with yearly editions. This year there will be many new milk products. A bread study is going on at the moment, this study employs a new sampling procedure. An update of all Iodine values in foods are in progress, as Denmark has carried out an 'Iodine fortification act'

Finland (Heli Reinivuo) A new website is planned for autumn 2003. The technology applied will be a PostGres-SQL database for the data and dynamically created tables for the website. The website is planned as multi-languag: Finnish, Swedish and English. There is a mayor work in progress on vitamin D content, as all milk products for the Finnish market since the beginning of 2003 are to be fortified with vitamin D.

Current status on availability of data

Country	fee	free
Denmark	-	+
Finland	+	(-)
Iceland	-	+
Norway	-	+
Sweden	-	+

6.3.3 EuroFIR proposal, status

Anders Møller oriented on the objectives of the EuroFIR project and the current status. The slides presented is in the following table:

<p style="text-align: center;">Internationalt samarbejde</p> <ul style="list-style-type: none"> • EuroFIR (DG RTD, NE) • HARMONID (DG SANCO, Project) • SAFE FOODS (DG RTD, IP) • EPIC/IARC EPIC Nutrient Database • NORFOODS web projekt • SCF/EFSA Intake and Exposure • FAO Expert Groups • LanguaL/EuroCode 	<p style="text-align: center;">The EuroFIR Project</p> <p style="text-align: center; font-size: small;"> PROPOSAL FULL TITLE: <i>European Food Information Resource</i> PROPOSAL ACRONYM: <i>EuroFIR</i> DATE OF CALL: <i>17/12/02</i> TYPE OF INSTRUMENT: <i>Network of Excellence (NE)</i> </p>
--	---

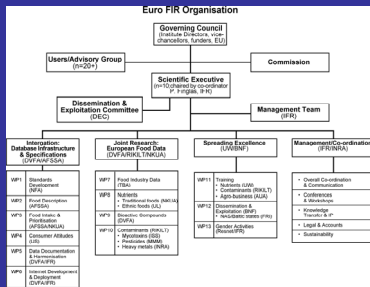
EuroFIR Strategic Objectives

- (1) To build and disseminate a comprehensive, coherent and validated databank system providing a single, authoritative source of food composition data in Europe for nutrients, newly emerging bioactive compounds with putative health benefits and food contaminants.
- (2) To enhance compatibility between food consumption/food intake databases and nutrient, residue and contaminant databases for an improved understanding of data variability and uncertainty and their relevance in European food safety policy and risk management.
- (3) To deploy the bioactive database in an Internet environment for easy access for end-users (regulators, consumers, academics, and industry) in order to support the evaluation of genetically modified food plants, other new food plants (and varieties), and for general diet and health considerations of food plants.
- (4) Transferring knowledge output to all stakeholder and user groups.

EuroFIR Partners

- Institute of Food Research, UK
- British Nutrition Foundation, UK
- Centre for Superior Studies on Nutrition & Diabetics, ES
- Danish Veterinary and Food Administration, DK
- National and Kapodistrian University of Athens, GR
- Food Research Institute, SK
- Agence Française de Sécurité Sanitaire des Aliments, FR
- National Institute of Health, Lisbon, P
- Istituto Superiore di Sanità, IT
- Ministry of Agriculture & Forestry, Helsinki, SF
- National Food Centre Ireland, Teagasc, IRL
- National Institute for Food and Nutrition Research, Rome, IT
- National Institute for Agricultural Research, FR
- National Institute of Public Health, CZ
- National Institute of Public Health and the Environment, NL
- National Public Health Institute, SF
- RKILT – Institute of Food Safety, NL
- Swedish National Food Administration & Swedish University of Agricultural Sciences, Uppsala, SW
- University of Helsinki, Helsinki, SF
- Wageningen University, NL

EuroFIR Organisation



EuroFIR Financial Impact

Forecast first 18 months:

WP5: 20,000 euros

WP6: 80,000 euros

WP9: 70.000 euros

equivalent to ~ 2 man years

+ subcontracting additional 50.000 euros

HARMONID

Objective:
Improvement of food intake assessment using currently available data based on individual food consumption surveys.

by

- Creation of a publicly available database on mean individual food consumption and percentage of consumer
- Creation of a common level of aggregation available for ongoing and future national food intake surveys
- Definition of minimal requirements for the e-dietary information system

~ 0.5 – 1.0 man year for IFSE (18 months)

Web Sites

- www.eurofir.org
- www.foodcomp.dk/norfoods
- www.lanqual.org
- www.foodcomp.dk/basis
- www.foodcomp.dk/eurocode

This also covered a brief introduction to related projects and bodies:

- Harmonid
- Safe Foods
- EPIC/IARC
- EFSA
- FAO expert group

6.3.4 Follow up on last meeting's tasks

6.3.4.1 NORFOODS web site

Norfoods website has been established and is available on:

<http://www.foodcomp.dk/norfoods>

There is a member-only section aimed at this working group and upcoming projects.

6.3.4.2 Can we get access to each other's data layout-unformatted ?

Agreement was made to share data in the existing transport file formats for internal use. Data shall be hosted on the member only section of the Norfoods web site.

Anders Møller suggested that the methods that he and Tue Christensen developed for gaining access to food composition data (lookup) from USDA and SLV should be made available for the working group on the Norfoods site. This will demonstrate a linking call for one or several records based on a simple query.

Ivar Gunnarson questioned the need for accessing other databases real-time. A joint/common database could be more suitable. The following discussion tried to solve whether a central database was a solution or if data is better updated with direct access to the regional databases.

Marianne Arnemo pointed out that it is a limited amount of users that would like to do direct comparisons between data from different sources e.g. Danish apples vs. Norwegian apples vs. Swedish apples.

Ivar Gunnarson urged us to focus on XML-technology for data transport. Once we have defined what to transport, we can do it effectively by using a XML-protocol. An existing example of this can be found in the FloraFood project, a central and east European project focused on the use of the nutritional software Alimenta. This project has defined a full DTD for XML and do provide examples on transport packages.

6.3.4.3 NORLEX

A request for rights to publish Norlex data on internet has been directed to Nordisk Minister Råd. A preliminary version of a Norlex based query system has been established on <http://www.foodcomp.dk/norfoods>. Data will later provide basis for an unified search process into the regional databases.

6.3.4.4 LanguaL use for food description (DK, FI)

Anders Møller explained how the Danish food composition databank was LanguaL-coded and Heli Reinivuo told about the ongoing effort of coding the Finnish food composition data.

6.4 Joint meeting with Norwegian food composition database group

6.4.1 New Nordic nutrient recommendations 2004 (and EU Nutrition Labelling Directive):

- energy calculations unchanged in the new proposal, fibre still included

The group agreed to inform the chairman of the NNR-group, that the factors used for energy calculation in NNR is not the factors that is actually used in the countries. The current trend in the rest of Europe is to stick to the factors applied by the nutritional labelling regulations. The factors and methods of energy calculation should be harmonized.

- vitamin A equivalent expression changed

The group agreed to follow the proposed changes.

- vitamin E equivalent expression changed

The group agreed to follow the proposed changes

6.4.2 Continuation and elaboration of value expression (NORFOODS 2000 work done in report; TemaNord 2002:522, bilaga 1):

- vitamin D: biological assay or chemical assay, and which 25-OH vitamin D activity factors are used;

The problem is which factor should be used. Anders Møller pointed out that Denmark and Finland have different factors. Ia Torelm oriented that no fixed factor was used in Sweden, the ratio is determined by the HPLC output. Kari Sygnestveit told that a Norwegian spreadsheet comparing methods exists and will be circulated.

- vitamin B1, thiamine expressed as thiamine hydrochloride or thiamine,

At the present Denmark, Norway and Sweden agrees on thiamine hydrochloride and Finland uses thiamine.

- vitamin B2, riboflavin expressed as ?
- vitamin B6, expressed as pyridoxine hydrochloride or ?
- pantothenic acid expressed as calcium D-pantothenate ?

It could be concluded that we do not agree on the mode of expression for many nutrients.

6.4.3 Information about Norwegian KBS software (Elin Bjørke Løken)

Elin Bjørke Løken demonstrated features from the KBS software. The group discussed different calculation approaches according to which type of component intake that should be estimated.

7 Appendix 3: Poster presented at 5th International Food Data Conference



NORFOODS NORDIC FOOD COMPOSITION DATA ON THE INTERNET

<http://www.foodcomp.dk/norfoods>

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INTRODUCTION

NORFOODS is a project group under the Nordic working group on food and nutrition within the official Nordic co-operation concerning foods, sponsored by the Nordic Council of Ministers.

The goals of the projects are to co-ordinate and render more effective the work on Nordic food composition data, database systems and analyses of nutrients. NORFOODS started its activities in 1982 and proposals/recommendations, decisions and/or agreements have been made on a long range of matters in the food composition area, e.g. food classification, foods, energy calculations, nutrients, nutrient values, references, dishes/recipes, food composition data systems, collaboration with other Nordic working groups, European and international organisations.

NORFOODS – RECENT PUBLICATIONS

NORLEX - Nordic Glossary, Names and Terms, Foods¹

This publication is the result of many years' of collaboration between Nordic colleagues who work with food tables and food databases. The group came to the conclusion that a glossary with names and terms for food in the Nordic languages and in English, could simplify the work in these countries substantially, and formed a working group for this. The working group has during the past years received economical support from the Nordic Committee of Senior Officials for Food Issues, under the Nordic Council of Ministers. The Committee also pays for printing the glossary. The working group hopes that the glossary will be of help to all those who work in the food sector in the Nordic countries, especially those who handle nutrient tables and databases. Hopefully it can also be used in the food industry, in trade, restaurant business, tourism and education. (*TemaNord 2001:515 ISBN 92-893-0594-0, 178 pages, in Nordic languages and English*)

Norfoods 2000 - Nordic principles for quality assessed food composition data and dietary calculations.¹

One of the objectives of the NORFOODS 2000 project is to compile common Nordic principles for calculations of dietary intakes from consumption data (dietary calculations). Seven intake estimation systems used in the Nordic countries by the food and nutrition administrations were compared. The systems were compared with regard to calculation procedures, use and magnitude of retention factors, as well as the used food composition database's influence on final calculation results. A stepwise approach was chosen in order to identify differences due to energy calculation factors, definition of components, e.g. total carbohydrates, compositional values, yield factors, nutrient retention factors, recipe formulation and the calculation procedures themselves.

Significant differences were identified with respect to energy factors and definition of carbohydrates. Furthermore, differences concerning yield factors and food composition values were identified. (*TemaNord 2002:522 ISBN 92-893-0770-6, 73 pages, in Swedish*)

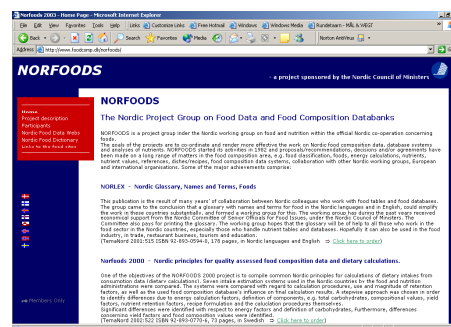
¹Both reports can be ordered from the web site of the Nordic Council and Council of Ministers (<http://www.norden.org/pub/>)

NORFOODS - NEW WEB SITE

The Nordic Council of Ministers has granted support for a common Nordic project on food data publishing on the Internet. The project started in the summer of 2002 and will finish by the end of 2003.

As a follow-up on previous NORFOODS projects supported by the Nordic Council of Ministers, NORFOODS started in the autumn of 2002 a project on the standardisation of food composition information in the Nordic countries.

Based on an on-line implementation of the Nordic Glossary of Food Names and Terms, a common website for the Nordic countries has been set up on a common Nordic website (<http://www.foodcomp.dk/norfoods>) hosted by the Danish Veterinary and Food Administration.



To facilitate searches and information retrieval from the on-line food composition databases in the Nordic countries (currently Denmark, Finland, and Sweden, with Iceland and Norway to follow soon), a common interface to all on-line databases will be developed. For the data retrieval, a common interface will be developed as an XML schema, which enables the national sites to include other countries' data in their own on-line databases.

Significance

The many years of collaboration on food composition issues in the Nordic countries has shown clear needs for a common approach or standardisation of both food composition data and the presentation thereof. The two recent reports from NORFOODS underline these needs. Through close collaboration, labour is saved by using the knowledge and creativity found in the national food authorities. Advantages are created for both internal and external users of the databases by standardisation of data flow. The proposed interlinking of the national databases will also simplify accessibility to the databases for both Nordic and other users.

CORRESPONDANCE

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