



Overview of DATEX activities in the field of food consumption data

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Food consumption

Food consumption data is an integral component of EFSA's risk assessment process



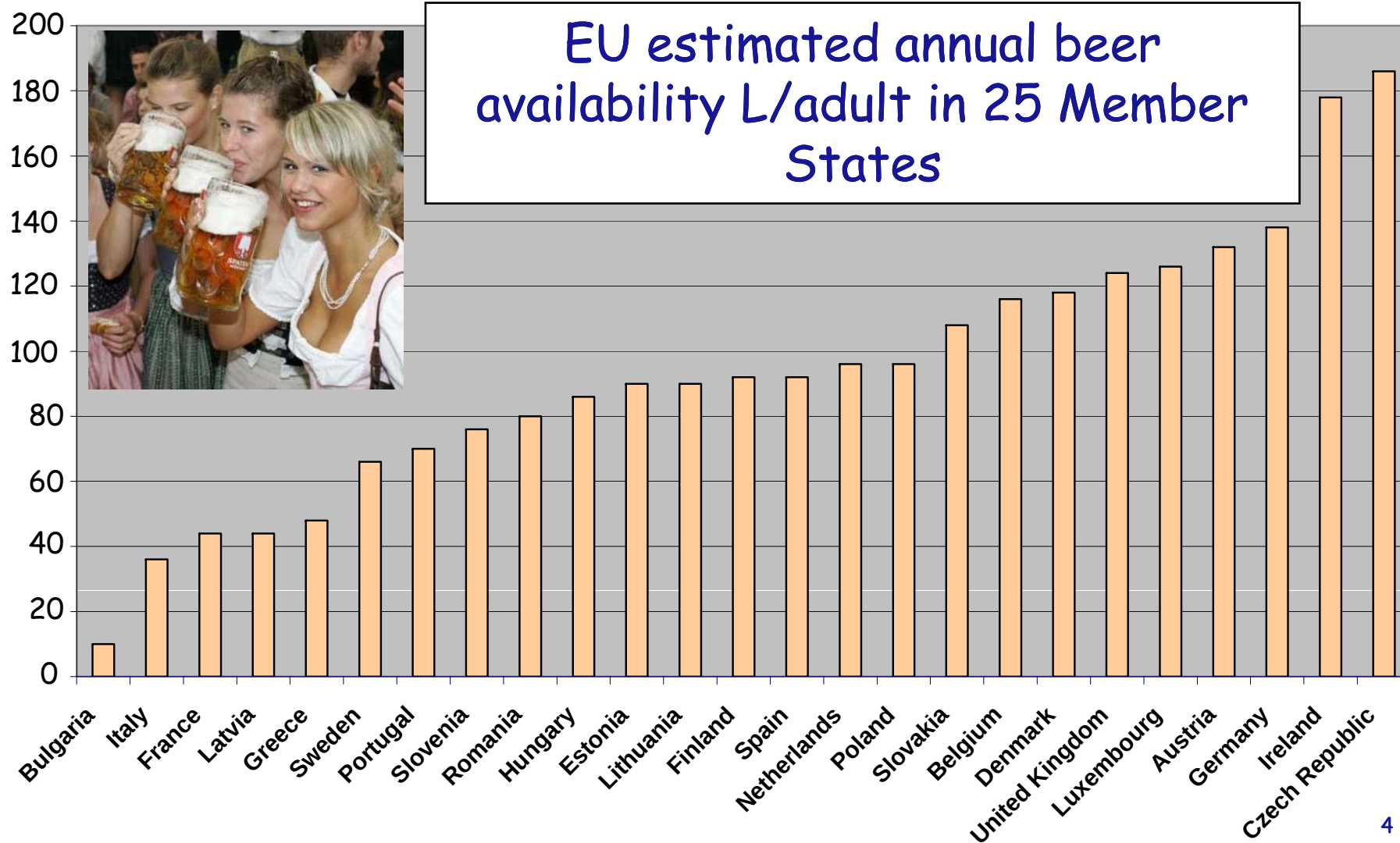
Accurate and **detailed** information is essential to enable EFSA to carry out its mandate

Regulation (EC) N° 178/2002



- EFSA “shall search for, collect, collate, analyse and summarise relevant scientific and technical data in the fields within its mission. This shall involve in particular the collection of data relating to food consumption and the exposure of individuals to risks related to the consumption of food”;
- EFSA “shall work in close cooperation with all organisations operating in the field of data collection, including those from applicant countries, third countries or international bodies”.

Geographical variations



Age and physiological variations

Pregnant women



Small children



Infants

Vegetarians, diabetics, ...



Elderly

Average vs. high consumption

Within a risk assessment process, mean consumption levels are not sufficient.

It is fundamental to consider also non-average individuals, and in particular **high consumers** (those who consume relatively large quantities of foods).



Information sources

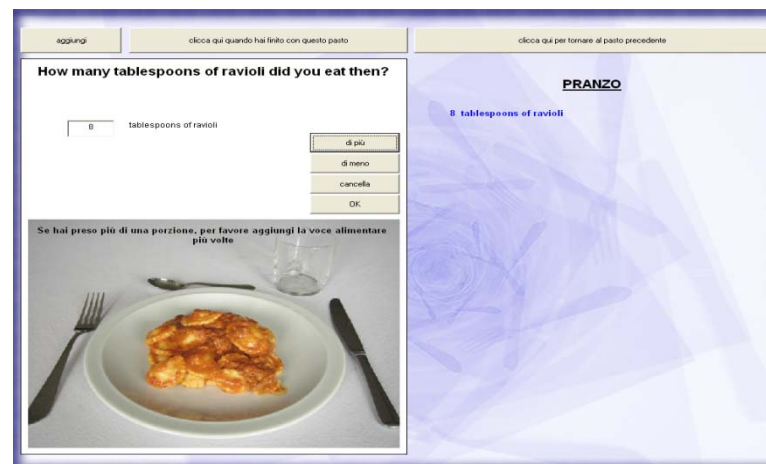
In principle, to assess food consumption three different types of data can be used:

- food supply data (**GEMS/Food**),
- data from household surveys (**EUROSTAT**), and
- data from dietary surveys among individuals.

Dietary record



24 hours recall



A screenshot of a web-based survey interface for a 24-hour recall. The interface is in Italian. It asks 'How many tablespoons of ravioli did you eat then?' and shows a spinner set to 0. There are buttons for 'di più' (more), 'di meno' (less), 'cancella' (cancel), and 'OK'. Below the question, there is a note: 'Se hai preso più di una porzione, per favore aggiungi la voce alimentare più volte' (If you have eaten more than one portion, please add the food item more times). At the bottom, there is a photograph of a plate of ravioli. On the right side, there is a section titled 'PRANZO' (Lunch) with a sub-header '8 tablespoons of ravioli'.

Dietary surveys among individuals

Food consumption data from dietary surveys are available in a majority of European countries, but data obtained at national level can often not be compared directly because of various survey methodologies and various food categorisation systems.

Main factors affecting reliability and completeness of the data:

- ▶ Number of days
- ▶ Food codification level
- ▶ Composite foods / recipes



EFSA Scientific Colloquium 3



"A common database on food consumption would improve the consistency and reliability of exposure assessments carried out by the various EFSA Panels and other experts in Europe".

Conclusions and recommendations

In the short term:

"... the **compilation** of existing food consumption data can be performed in order to make data as comparable as possible across Europe".

In the long term:

"... **harmonised** food consumption data **collection** should be promoted in order to obtain a fully harmonised European database.

Expert group on food consumption data

Network of 32 members, each member representing a European country.

- First meeting: 18 January 2007
- Second meeting: 24 October 2007
- Third meeting: 30 October 2008



- To provide a platform for exchange of views with the best experts in Europe on ways to harmonise methodologies for the collection and collation of food consumption data
- To coordinate and facilitate the merger of national food consumption information into a pan-European food consumption database

EFSA's Concise European Food Consumption Database

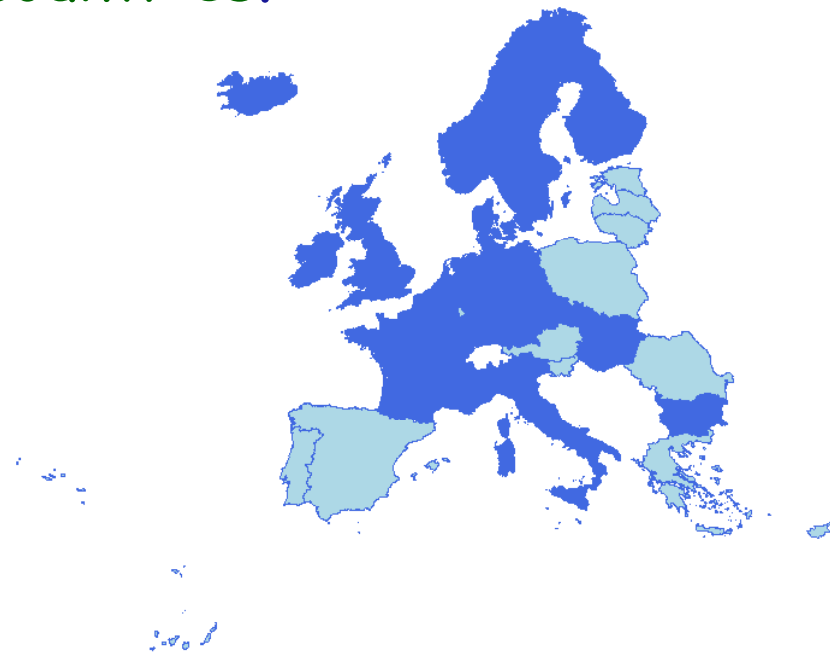
The Concise European Food Consumption Database is called "concise" since it is intended to provide a **limited number of data** that will allow easy performance of a **conservative exposure assessment** by the EFSA Scientific Panels and Member States.

It contains consumption data for:

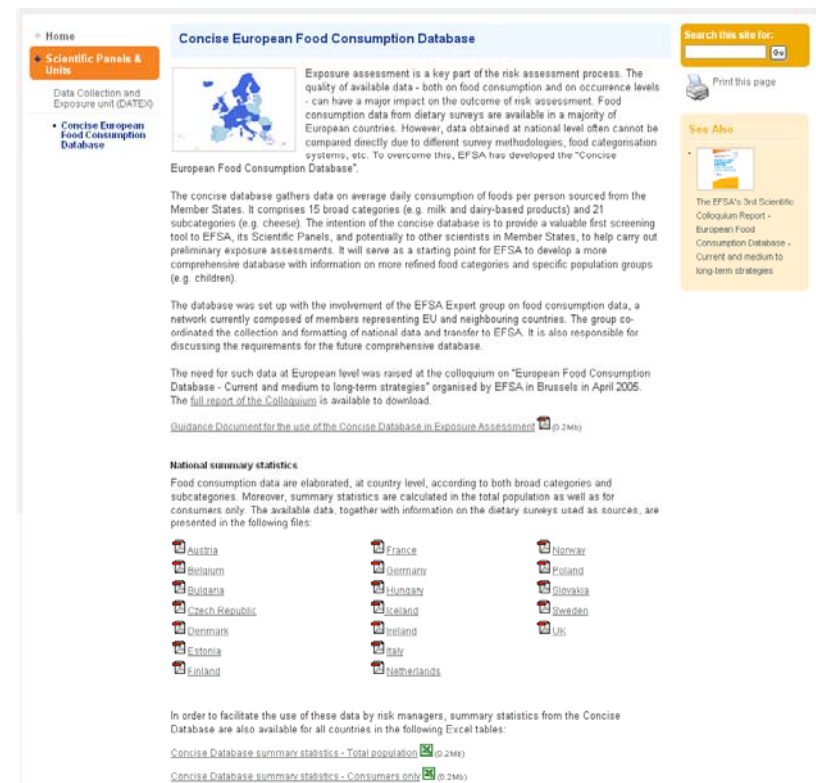
- **15 main food categories**
(e.g. milk and dairy based products)
 - **21 sub-categories** (e.g. cheese)
- **adult population** (16 to 64 years old).

EFSA's Concise European food consumption database

Individual food consumption data for the main food categories and sub-categories are currently available for 19 European countries.



■ Data available ■ Data not available



The screenshot shows the EFSA website for the Concise European Food Consumption Database. It includes a navigation menu with 'Home' and 'Scientific Panels & Units'. The main content area features a map of Europe and text explaining the database's purpose: to provide a valuable first screening tool for EFSA and other scientists. It also mentions the involvement of the EFSA Expert group on food consumption data. A section titled 'National summary statistics' lists 19 countries with their respective flags: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Iceland, Italy, Netherlands, Norway, Poland, Slovakia, Sweden, and the UK. At the bottom, there are links to 'Concise Database summary statistics - Total population' and 'Concise Database summary statistics - Consumers only'.

Questions that cannot be answered

- What is the maximum amount of **bivalve molluscs** consumed in one day by individuals in Europe?
- What are the high consumption levels of **rocket salad** (rucola) in Europe?
- Can a high consumer of **smoked meat** be also a high consumer of **smoked fish**?
- What are the consumption levels of **pig and calf liver** in the elderly population?
- ...



Short and long term objectives

In the short term:

compilation of existing food consumption data

- at the most possible disaggregated level
- for population groups other than adults, e.g. small children, elderly, ...

In the long term:

Promote the collection of harmonised food consumption data collection

- by Member States
- within a pan-European dietary survey

Current projects

1. "Individual food consumption data and exposure assessment studies for children" (EXPOCHI) - CFP/EFSA/DATEX /2008/01.
2. "Collaboration agreement for the provision and processing of food consumption data" (Comprehensive European food consumption database) - DPPA/EFSA/DATEX/2008.
3. Pilot study in the view of a Pan-European dietary survey - Infants and children. Open Call for proposals. CFP/EFSA/DATEX/2009/02

Individual food consumption data and exposure assessment studies for children

Main objectives:

- to carry out an independent exposure assessment study in children (in particular young children, 1-3 years old) for food colours, selenium, chromium and lead;
- to provide individual food consumption data at the finest level of detail for children for different Member States

Project ending in December
2009.



The application

	Country	Provider	Period	Age years	Representative	Days	Method
1	Belgium	Ugent	2002-03	2.5 to 6.5	Regional (Flanders)	3	Dietary record
2	Cyprus	REF	2002-06	2 to 18	National	3	Dietary record
3	Czech Republic	NIPH	2003-04	4 to 9	National	2	24-hour recall
4	Denmark	DTU Food	2000-02	4 to 14	At national level	7	Dietary record
5	Finland	Evira	2000-02	from 6	Regional (South-west)	4	Dietary record
6	France	AFSSA	2005-07	3 to 17		7	Dietary record
7	Germany	FKE	1995	4 to 6	Regional (Dortmund)	3	Dietary record
8	Greece	UoC	2004-05	3 to 6		3	Dietary record
9	Italy	INRAN	2005-06	from 0	National	3	Dietary record
10	Poland	NFNI	2000	1 to 14	National	1	24-hour recall
11	Spain	FIN	1998-00	from 2	National	2	24-hour recall
		PGHI	2004-05	4 to 18	Regional (Basque)	2	24-hour recall
12	Sweden	NFA	2003	4, 8 and 11		4	24-hour recall
13	Netherlands	RIKILT	2006-07	2 to 6	National	3	Dietary record

Comprehensive European food consumption database

Competent organisation nominated in each country by its Permanent Representative to the European Union.

The food consumption data to be provided must be:

- representative at national level of the adult population;
- collected at individual level by means of a 24 h recall or dietary record); and
- the most recent data within the country.

EFSA will financially support National institutions for the work needed to make the data accessible.

Data will remain the property of the national provider and will only be used for risk assessments conducted by EFSA.

State of the art

Target	27 Member States	
Collaboration agreement signed with	20	Austria Belgium Bulgaria Czech Republic Denmark Estonia Finland France Germany Hungary Ireland Italy Latvia Poland Slovakia Slovenia Spain Sweden The Netherlands United Kingdom
Countries not applying	3	Lithuania Romania Cyprus
Countries without data	4	Greece Luxembourg Malta Portugal

Data transmission

All participating institutions were first requested to provide EFSA with a **database schema** describing their food consumption and related data tables.

Based on this information, the DATEX Unit developed a first draft of a **data model** that was proposed, discussed and endorsed during a meeting held on 3rd March, 2009 in which all data providers were represented.

This data model will be used for the data transmission of the food consumption data.

Project ending in
January 2010.



Pilot study in the view of a Pan-European dietary survey - Infants and children

The main objectives of the project are to:

- develop tools and procedures for the collection of individual food consumption data for children, infants and their breastfeeding mothers in the view of a Pan-European survey in the same population groups;
- test the above mentioned tools and procedures within a pilot dietary survey conducted in different Member States in different countries of the European Union;

The deadline for submitting proposals
is the 21st September 2009.

Food Consumption and Exposure Working Group (FCE WG)

The FCE WG is currently drafting:

EFSA Guideline on methods and protocols for the collection of national food consumption data in the view of a Pan-European dietary survey.

- First draft ready and circulated for comments at the beginning of September 2009.
- Discussed and hopefully endorsed by the Expert group on food consumption data in middle October 2009



Pan-European dietary survey

- Develop project plan, time line and budget
- Organise internal and external funding sources
- Assess EU Member State commitment
- Link up with interested external partners
- Create collaborative consortium
- Collect food consumption data

Action summary

Activity completed by	2009						2010											
	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1st draft of Guidelines on dietary surveys in EU endorsed by the FCE WG																		
Guideline discussed and (hopefully) endorsed by the Expert group on food consumption data																		
Implementation of the art. 36 pilot project – Pilot study on Infants and children.																		
Pan European FC survey Project proposal presented to all necessary institutions (Scientific Committee, Advisory Forum, Management Board, DG SANCO, Budgetary Authority and/or European Parliament)																		

Action summary of the Pan-European dietary survey

Activity completed by	2011	2012	2013	2014	2015	2016
Project preparation						
Dietary survey in 5-7 countries						
Dietary survey in 5-7 countries						
Dietary survey in 5-7 countries						
Dietary survey in 5-7 countries						
Dietary survey in 5-7 countries						

Countries selected in:

- different geographical areas in order to immediately have a good coverage of different consumption patterns in Europe (macro areas to be identified)
- children and/or adults (alternate any other year?)

Questions?



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