



The Efcovall project started in October 2006 and is due to finish in September 2009. We aim to produce a series of newsletters to inform you of the progress we're making between now and the end of the project. It's the nature of such projects that results don't appear in the first year or even the second, but we have been busy doing the ground-work and several of our work packages have held a series of workshops which we summarise in this issue.

### What is the EFCOVAL project?

EFCOVAL – *European Food Consumption Validation* – aims to carry on the work of the EFCOSUM project by *further developing and validating a pan-European food consumption method*. EFCOSUM recommended using 24-hour recall interviews as the best method to obtain reliable and comparable data from the many different European nations and recommended using EPIC-SOFT software developed by the International Agency for Research on Cancer (IARC) as the tool to gather that data.



SIXTH FRAMEWORK  
PROGRAMME

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More details of the presentations are available on the Efcovall website at [www.efcoval.eu](http://www.efcoval.eu)

### How is the project set up?

The project is split into 5 work packages:

- Work package 1 is testing the validity of EPIC-SOFT by using it to gather data in several European countries and then comparing the results within and between those countries.
- Work package 2 is taking a closer look at the methodologies used to collect data from young children.
- Work package 3 aims a) to produce an improved statistical tool for estimating usual intake distributions from the 24-hour recall data collected using EPIC-SOFT and b) to propose a technique for estimating the uncertainty of food consumption methods.
- Work package 4 aims to provide specific recommendations on how to adapt the method being designed to assess dietary intake at an individual level (using EPIC-SOFT) for use in the assessment of dietary exposure to a specific category of potentially hazardous substances.
- Work package 5 involves the upgrade of the EPIC-SOFT program, both functionally and technologically and includes support for Work package 1 so that the program is ready for use in the different European countries taking part in this study.
- Work package 6 involves sharing the project aims and results with the rest of the world – this newsletter forms part of this package, as does the website at [www.efcoval.eu](http://www.efcoval.eu)

### What is the project going to produce?

We are working on an upgrade to EPIC-SOFT that will ultimately be available for use on individual food consumption projects within Europe (both within countries and between countries). In addition, there will be specific advice on how to set up the program in countries that have not previously used it, and recommendations on how to use it to assess public health and food safety issues when carrying out surveys.

**Workshop run by Work package 4:**  
**Food consumption data needs for the assessment of dietary exposure to flavourings in the EU. Held in Rome, Italy on 28 September 2007.**

The workshop was organised in order to involve both EFCOVAL partners and outside experts in exposure assessment at European level. In particular, the collaboration of experts involved in exposure assessment within international organizations (above all EFSA, FAO, WHO and the European Commission) was invited.

*Work package 4 aims to provide specific recommendations on how to adapt the method of assessment of dietary intake by using EPIC-SOFT in the assessment of dietary exposure to a specific category of potentially hazardous substances.*

The target category chosen for discussion was 'Flavouring substances'. Within the target category a limited number of specific food chemicals were selected in order to demonstrate how they would be recorded within EPIC-SOFT. These were: coumarin, glycyrrhizinic acid, raspberry ketone and caffeine.

The workshop was in three sections: Section 1, "Why do we need exposure data? Risk assessment and risk management" introduced the topic of flavourings in terms of data requirements for risk management and risk assessment at European and international level, with particular attention given to the issue of uncertainty in exposure assessment of flavourings. The aim of Section 2, "Occurrence data", was to identify and discuss the availability of data on the occurrence of flavourings in food. The final section, "Consumption data", was focused on the limitations of the food consumption surveys performed at EU level for the assessment of dietary exposure to flavourings, and the potential of EPIC-SOFT to improve these assessments.

Discussion focused on the potential of EPIC-SOFT to collect data on the consumption of flavoured foods. The use of the EPIC-SOFT software makes it possible to collect information at brand level and the food items can be characterized at a high level of detail. However, by adding this level of detail to the 24-hour recall interview, the demands on those being interviewed may be too high in terms of recall (ie remembering what flavourings they had consumed on the previous day) and time taken to carry out the interview.

It was made clear that the assessment of dietary exposure to flavourings added to foods is a huge and complex task and that the exercise performed in the EFCOVAL project in relation to a limited number of target flavourings will of course not solve the whole issue. However such an exercise was considered a small but positive step in the direction of increasing knowledge and decreasing uncertainty in the area of dietary exposure to flavourings.

**Workshop run by Work package 3(a):**  
**Technical Workshop, Wageningen March 2007**

Food consumption surveys capture rich information on an individual's food consumption on a limited number of days (eg 2x24-hour periods). Therefore statistical methods are needed to derive more detailed information on usual dietary intake covering long-term consumption. A challenge is to estimate usual intake distribution in the case of heterogeneous groups and non-consumers within the population samples.

*As one of its first deliverables, Work package 3(a) has developed an improved statistical method for estimating usual intake distributions from food consumption surveys.*

Theoretical foundations of the new method for estimating usual distributions were successfully developed and presented at the workshop in Wageningen, March 2007. This technical workshop compared the new method, which is called the **two-part shrinkage (TPS)** method, to currently available procedures and presented first results using the new method. Potential datasets for validation and testing were presented at the workshop. The TPS-method is applicable to nutrient and food intake including episodically consumed foods. It is suitable to estimate usual intake on the population level as well as on individual levels in the case of many repeated measurements. Two manuscripts, describing the theoretical foundations and first applications, are now planned to be published in the middle of this year. Current work focuses on conversion of the TPS-method into program algorithms and software.

**Workshop run by Work package 2:**  
**Recommendations on a trans-European dietary assessment method among children. Held on 24-25 May 2007 at Hotel Gentofte in Copenhagen, Denmark**

*The aim of the workshop was to define or recommend specific requirements to assess dietary intake among children aged 4-14 yrs.*

In total 27 persons from 13 European countries and the USA attended the workshop. Besides the invited speakers and representatives from the 6 WP2 partners, invited experts representing 7 different European countries, participated.

The program included speakers from the 6 partners in WP2 presenting the dietary survey methods used for children in their countries: The Netherlands, Spain, Croatia, France, Denmark and Norway. The 3 external speakers gave the following presentations: Margaret McDowell from CDC/NCHS described the 24h recall method of ENHANES (US); Lauren Lissner from Sahlgrenska Academy at Göteborg University, Sweden, presented the EU-funded project IDEFICS focusing on the age group of 2 to 10 years; and Carine Vereecken from Ghent University, Department of Public Health, Belgium, presented the EU-funded project HELENA focusing on adolescents (13-17 years). The two last mentioned speakers addressed experiences of using the methods among children, challenges and problems especially regarding surveys involving several countries. Further, the workshop had a discussion session in 4 groups and plenum, resulting in a comprehensive description on advantages and disadvantages of the two main dietary assessment methods (24h recalls and food records in relation to two age groups: 4-10 years and 11-14 years) and how to deal with problems and challenges.

The workshop didn't reveal one obvious method to choose, but within WP2 it was decided to suggest two methods for children aged 4-14 years. For school children a method combining 2x24h recall and a food registration scheme (or booklet) for foods eaten away from home was suggested. For surveys on preschoolers 2x1 day food record was suggested. It was suggested to test the feasibility of using the EPIC-SOFT tool for data entry of the 24h recalls and also of the food records, if possible.

WP2 is now preparing a paper based mainly on the results and discussions from the workshop. In addition, the Efcoval WP2 is planning to conduct a feasibility study in Spain and Denmark on the 2x24h recall method for school children and a validation/evaluation study in Denmark.