

# tds>exposure

## Newsletter



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### A word from the coordinator

› TDS-Exposure is an ambitious research project aiming for better measurement of intakes of contaminants and nutrients in our diet. The kick-off meeting, held in Paris in February 2012 (see page 5), generated lots of enthusiasm amongst the participants.

It is now your turn to join in!

For many of chemical contaminants, diet is often the main source of exposure. Thus, when talking about heavy metals, pesticide residues, phthalates or bisphenol A, evaluation of dietary exposure is critically important. Risk management decisions at EU level rely on transparent, representative and robust exposure data, with good control of all the uncertainties. Unfortunately, it is not yet possible to compare exposure of different populations across Europe, as methods differ from country to country.

Total Diet Studies (TDS) provide a harmonised methodology for assessing exposure of the population to a wide range of dietary contaminants but also nutrients. TDS-Exposure was launched in February 2012 with the aim of creating an EU-wide network of TDS-Centres using common tools like databases and modelling software. With 26 participants from 19 countries, and strong links with European and international organisations like WHO, FAO or EFSA, TDS-Exposure has a unique opportunity to implement studies in several countries that, currently, do not have a TDS programme.

This first newsletter focuses on the objectives of TDS-Exposure, and presents the work programme and partners as well as the kick-off meeting and upcoming events.

Enjoy the read!

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# › 01: About TDS-Exposure

## Background

› Total diet studies (TDS) complement traditional monitoring and surveillance by providing a scientific basis for population dietary exposure to nutrients and non-nutrients including contaminants, and the potential impact on public health.

However, most EU Member States and Candidate Countries do not have TDS programmes and, where they are in place countries may use a variety of methods to collect data. There is, therefore, a need for harmonisation of dietary exposure methods and risk assessment worldwide.

## At a glance

Duration: 4 years  
 Budget: over 7.5 million Euros  
 Partners: 26  
 Countries: 19  
 Work Packages: 11

## Scope

› TDS-Exposure will focus on exposure to food contaminants including heavy metals, mycotoxins and persistent organic pollutants (POPs, e.g. polychlorinated biphenyls), which can harm human health. The project will look at other substances, and try to estimate chronic exposure to pesticide residues in foods as well as intake of food nutrients.

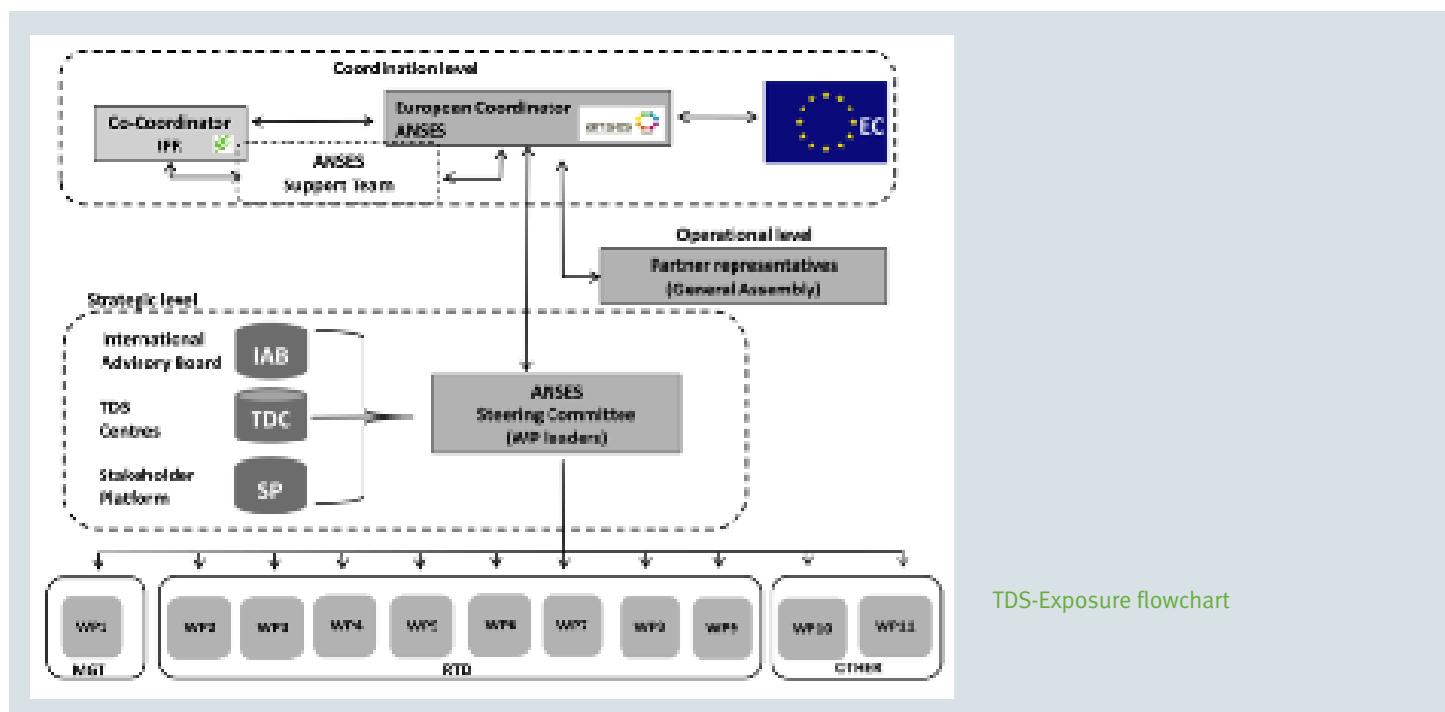
## Objectives

› Standardise methods for selection of chemical contaminants, food sampling and preparation, analyses, exposure assessment calculations and modelling.

- Assess approaches and methods for food sampling and analyses
- Define best practice
- Establish contaminants and foods most contributing to total exposure in Europe

› Provide training (see page 5) for those countries without TDS in place

- Enable best practice in the creation and execution of TDS programmes in those regions lacking such population studies
- Ensure data collected in the future can be compared across countries
- Publish information about upcoming and existing European TDS to promote better handling of dietary exposure data
- Establish a legacy of harmonised methods and science-based recommendations for public health worldwide



## Expected outcomes

- Methods defining populations of interests (e.g. young children, older adults), and choosing contaminants and core foods
- Standardised methods for food preparation and analysis
- Pooled food composition database for related food groups, prepared and cooked as consumed
- Homogenous approach estimating nutrient intakes and exposure to contaminants for each population of interest
- A network of TDS centres, and implementation of new TDS in several countries and relevant training

Want to know  
more?

**Project website**

[www.tds-exposure.eu](http://www.tds-exposure.eu)

Launched in May 2012, the website presents a general overview of the project and will keep you informed about the upcoming events and project progress.

## Publications

› Egan, Bolger & Carrington (2007) Update of the US FDA's Total Diet Study food list and diets. *JESEE* 17: 573-582  
<http://www.nature.com/jes/journal/v17/n6/full/7500554a.html>

› Sirot et al. (2009) Core food of the French food supply: second Total Diet Study. *Food Addit Contam* 26(5): 623-639  
<http://www.tandfonline.com/doi/abs/10.1080/02652030802695506>

› Joint Guidance of EFSA, FAO and WHO. Towards a harmonised Total Diet Study approach: a guidance document. *EFSA Journal* 2011; 9(11):2450.  
[www.efsa.europa.eu/en/efsajournal/pub/2450.htm](http://www.efsa.europa.eu/en/efsajournal/pub/2450.htm)

## › 02: Progress and achievements

The TDS-Exposure kick-off meeting assembled 51 participants representing the project partners, the European Commission (EC) and the European Food Safety Authority (EFSA). It was a great opportunity for the participants to meet and establish working relationships. The scientific officer presented rules and tips for a successful implementation of a FP7

project as well as principles for collaboration between the project consortium and the EC. EFSA representative presented guidance notes, jointly prepared by EFSA, FAO and WHO, describing how TDS should be implemented, and reassured the audience about the upcoming availability of foodex2 codification system.



Kick-off Meeting - 29th February to 2nd March 2012, Maisons Alfort (FR)

### Choice of substances of interest and populations of consumers (WP2)

12th June 2012, Maisons Alfort (FR)

This meeting established populations of interest, and shared initial results from the bibliographical on substances as well as discussing the criteria for the relevance of the TDS approach and the prioritisation of chemical substances.

### Food sampling: food products collection (WP3)

11th June 2012, Maisons Alfort (FR)

Specific issues related to “food list” and “food shopping list”, and the content of a database of papers were discussed. A very fruitful discussion was also had with a representative from the EFSA unit on Dietary and Chemical Monitoring defining the exact needs of different WPs and the procedure for accessing EFSA’s food consumption database.

### Training on data-organisation (WP8 Exposure assessment - Methodology and software)

21<sup>st</sup>-22<sup>nd</sup> June 2012, Bilthoven (NL)

The main aim of this training was to organise data in a harmonised fashion so exposure assessment can be performed at the international level. The primary tool used was the internet-based exposure assessment software Monte Carlo Risk Assessment (MCRA). Organisation of national consumption and concentration data (derived from previous TDS) was explained. Nine participants

representing six European countries participated, and started by organising their national data. After an introduction of the MCRA software, they performed various exercises to gain understanding of the various issues concerning exposure assessment in a (harmonised) TDS exposure approach.

### First Steering Committee Meeting

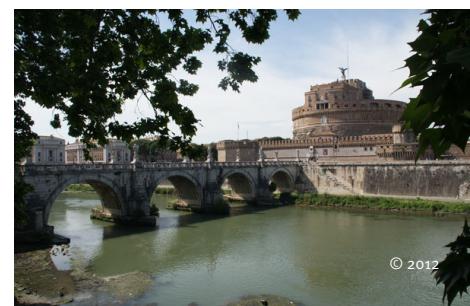
6<sup>th</sup>-7<sup>th</sup> September 2012, Rome (IT)

The first Steering Committee meeting took place at Consiglio per la Ricerca e la Sperimentazione in Agricoltura (CRA) Institute, former INRAN. The meeting was a great opportunity to get an update on progress, and for feedback on the quality manual and the publication guidelines. The objectives for the first period have been achieved, and the

milestones and deliverables provided by each work package. The partners have worked hard together to ensure the project is off to a great start; already aspects of the project are moving towards consistent methods. How to realise these needs, particularly practical implementation (e.g. food coding), was addressed during this meeting.

### Missed this training?

Don't worry, a second training will be organised early 2013. To join our training, see page 4.



Castel Sant'Angelo, Rome

## › 03: Join the network

### › Call for stakeholders

With the help of the World Health Organization (WHO), TDS-Exposure has created a list of TDS experts from around the world including the 12 countries outside of Europe with TDS Programmes, namely US, Australia, Canada, China, Hong Kong, Mali, Thailand

and Vietnam. To receive regular updates on news, meetings and training opportunities, join the network.

If you are an expert from a TDS center please contact [hannah.pinchen@ifr.ac.uk](mailto:hannah.pinchen@ifr.ac.uk) and/or [paul.finglas@ifr.ac.uk](mailto:paul.finglas@ifr.ac.uk)

All other stakeholders please contact Helga Gunnlaugsdóttir: [helgag@matis.is](mailto:helgag@matis.is).

### › Join our training (WP10 training)

Our objective is to promote knowledge and skills development across TDS-Exposure through training and education activities, which will include three Summer Schools and individual exchange visits. The Summer Schools will focus on setting up and running TDS whilst the exchange visits will allow individuals to enhance their practical skills; ultimately disseminating knowledge and experience from those organisations respon-

sible for national TDS to those who facing the daunting task of initiating a programme in their country.

Existing and new e-learning modules will support these face-to-face activities. To participate, your organisation must be a beneficiary of TDS-Exposure or willing to fund attendance. Priority will be given to those countries/ regions without TDS, but individu-

als including PhD and Masters Students or organisations new to established TDS are encouraged to participate.

Further details will be published online (<http://www.tds-exposure.eu/?q=training-and-spreading-excellence>) and via email in due course. To participate, please contact: [sian.astley@eurofir.eu](mailto:sian.astley@eurofir.eu)

## › 04: Upcoming events

**1<sup>st</sup> TDS-Exposure General Assembly**  
February-March 2013, Norwich (UK)



**2<sup>nd</sup> TDS-Exposure Steering Committee meeting**  
February-March 2013, Norwich (UK)

**EuroFIR13 conference**  
4th-8th March 2013, Ljubljana (SI)  
More on [www.eurofir.org](http://www.eurofir.org)

Norwich

## › 05: Project partners

Coordinated by ANSES, the TDS-Exposure consortium includes 26 beneficiaries, including 10 research centres, six food safety agencies, five universities, four national institutes of public health, and one SME. The range of expertise covers: analytical chemistry, exposure assessment, food safety, epidemiology, statistics and modelling, social sciences.



French Agency for Food, Environmental and Occupational Health & Safety



Institute of Food Research



Ghent University



National Food and Nutrition Institute



European Food Information Ressource



National Institute for Public Health and the Environment

National Institute for Public Health and the Environment



National Food and Nutrition Institute

Consiglio per la Ricerca e la Sperimentazione in Agricoltura (CRA) Institute, former INRAN



Bundesinstitut für Risikobewertung

Federal Institute for Risk Assessment



University of Granada



University College Dublin



Centro Nacional de Alimentación



Ghent University



Croatian Food Agency



PĀRKAS UN VETERINĀRAIS DIENESTS

Assessment and Registration Agency of Food and Veterinary Service



Finnish Food Safety Authority Evira

Ministry of Health, Social Services and Equality - Spanish Food Safety and Nutrition Agency



The Food and Environment Research Agency

The Secretary Of State For Environment, Food And Rural Affairs

Instituto Nacional de Saúde  
Doutor Ricardo Jorge



National Health Institute

Dr Ricardo Jorge



Norwegian Institute of Public Health



MATIS OHF



National Health Institute



TÜBİTAK Marmara Research Centre Food Institute



University Rovira i Virgili



vision on technology

Flemish Institute for Technological Research NV



National Food Agency

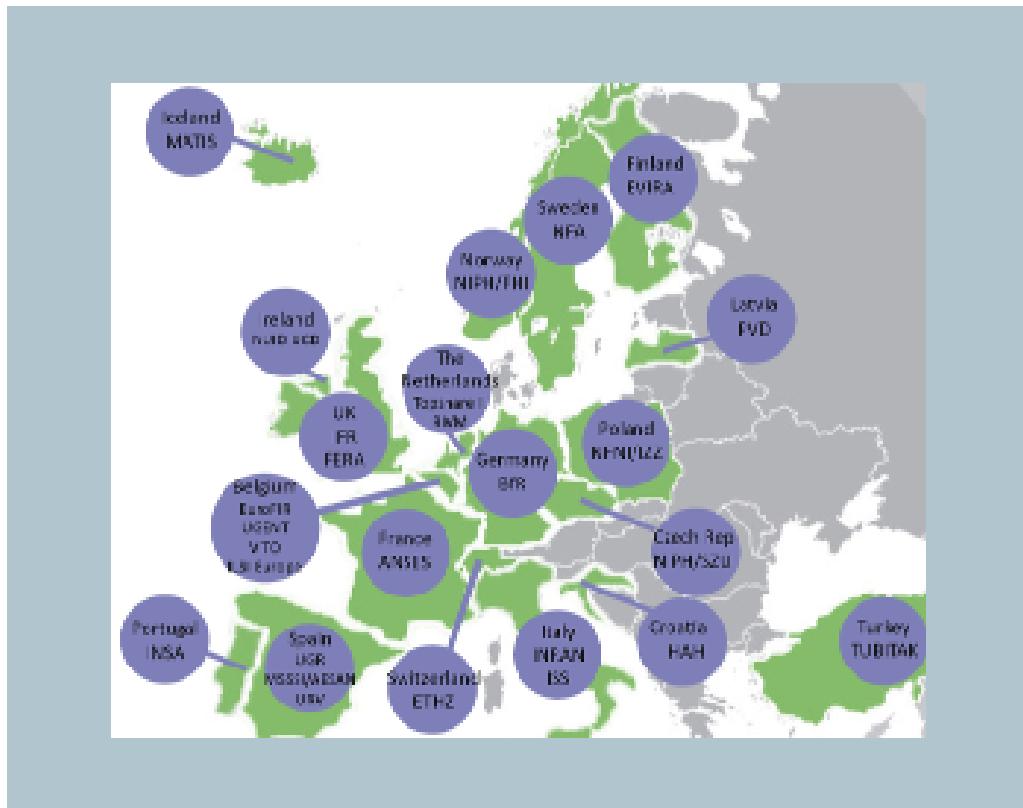


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International Life Sciences Institute  
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