BfR MEAL Study - Information and Cooperation

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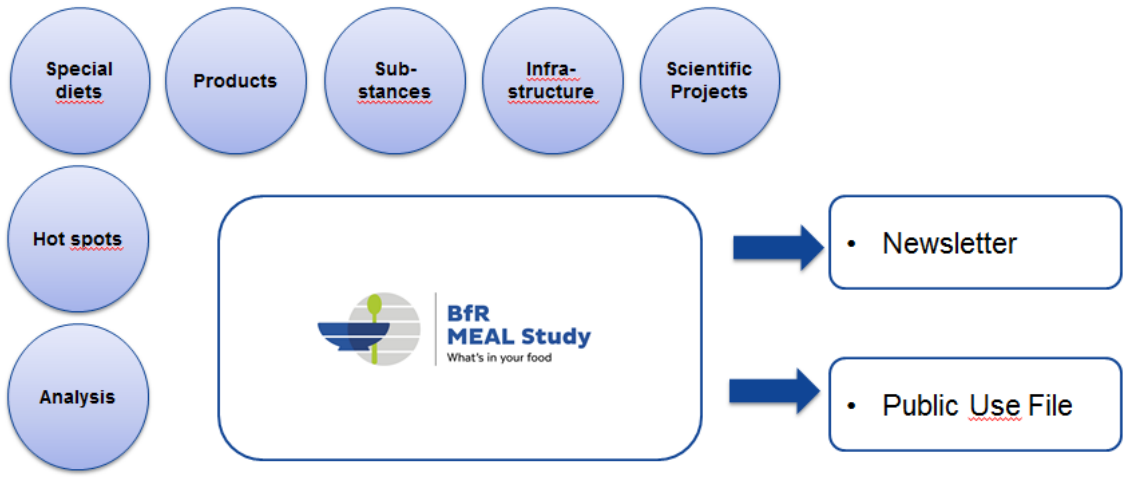
Total Diet Study (TDS) is the name given to a method recommended by the United Nations' Food and Agriculture Organisation (FAO) and World Health Organisation (WHO) to determine the mean concentrations of substances in the average human diet. In doing so, substances which are beneficial to health are examined along with those that are undesired. In combination with information from consumption studies which establish the average intake of foods by consumers, the mean total intake quantities of substances via food can be derived reliably and in detail with the help of TDS.

The first total diet study for Germany is entitled the BfR MEAL Study (***M**ahlzeiten für die **E**xpositionsschätzung und **A**nalytik von **L**ebensmitteln* – Meals for the Exposure Assessment and Analysis of Foods). It examines the health risks of processed and prepared food. The study takes into account the entire food range and analyses each dish in the condition in which it is typically eaten. These samples are subsequently examined in laboratories for various substance groups. In addition to additives and process contaminants, these include environmental contaminants, mycotoxins, nutrients, plant protection products, veterinary drugs and substances which can transfer to foods from packaging. The extent to which the average concentrations of substances differ in individual foods depending on the region, season or production type (e.g. organic or conventional cultivation) is also examined.

Total diet studies are currently being conducted in more than 50 countries all over the world. The BfR was commissioned in 2015 by the Federal Ministry for Food and Agriculture (BMEL) to conduct the first TDS for Germany. The project was sponsored with BMEL funds on the basis of a resolution of the German parliament. The BfR MEAL Study is scheduled to run for seven years and the first results for individual substance groups will probably be available in 2019. The study data will be made available to the scientific public in a Public Use file and a newsletter.

Cooperation options exist in various thematical areas within the scope of the BfR MEAL Study.



Possible connecting points for cooperation partners

Cooperation opportunities with the BfR

The BfR MEAL Study offers follow-on opportunities to cooperate with the BfR in the following areas:

- **"Substances"**
  Supplementation of the BfR MEAL Study by examining substances not prioritised by the BfR. Where necessary, supplementary studies of data on levels for relevant food categories and supplementary special sampling and testing (TDS method) of the identified foods should be conducted. A list of currently scheduled substances has been published.

- **"Hot Spots"**
  Supplementary sampling and testing (TDS method) of foods which have become conspicuous because of the high levels they contain, especially those with regional significance in Germany. A survey of market and if necessary consumption data could be conducted on this, with analysis.

- **"Special diets"**
  Supplementary sampling and testing (TDS method) of vegetarian/vegan foods, for example, as well as breast milk, gluten-free and "light" products. To supplement this, a survey of consumption data could be conducted for the corresponding consumer groups.

- **"Products"**
  Supplementary sampling and testing (TDS method) of defined product groups by refining the degree of detail or sampling products which do not belong to the 90 percent of the most-consumed foods.

- **"Scientific projects"**
  Supplementation of the BfR MEAL Study through scientific cooperation with the BfR. Here are a few examples of fields of cooperation which are of interest to the BfR:

  - Examination of individual raw products prior to processing (external project) and comparison with results after preparation, as well as pooling (BfR MEAL Study) to derive processing factors
  - Linking of the results of the BfR MEAL Study with data from human biomonitoring to estimate mean overall exposure
  - Comparison of the results of the BfR MEAL Study with third party data, including self-control data compiled by trade and industry

- **"Infrastructure"**
  Provision of information (e.g. market or origin data for food (ingredients)), storage capacity for reference samples or the set-up of a project sample base. Logistical support with the transport of samples.

- **"Analysis"**
  Participation in tendering processes for the examination of BfR MEAL samples. Additional information on this is available from the BfR and information on current calls for tenders via the BLE (e.g. currently planned substance list).

Time Schedule

The experimental part of the BfR MEAL Study begins in autumn 2016 and is subdivided into two phases. The core module, nutrients and mycotoxins are to be processed in the first two years so that the first results will probably be available in mid-2019. Process contaminants, additives and substances that migrate from packaging will be processed from 2018.

From the project idea to cooperation

The various cooperation options will be discussed depending on the type of cooperation project. An outline of the project idea and timeframe should be submitted to BfR Research Coordination along with the required extent of sampling and available independent funding. Where there are competing applications for external scientific expertise, the BfR will consult the BfR committees and/or MEAL advisory board as necessary for advice and prioritisation. Decisions will be reached in a timely manner depending on the applications submitted.

More information on the BfR MEAL Study at the BfR website

Press information: What's in our food: food crises easier to recognise in future

Provisional substance list

Flyer: BfR MEAL Study – Germany's first total diet study (in German)

About the BfR

The Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the Federal Ministry of Food and Agriculture (BMEL) in Germany. It advises the Federal Government and Federal Laender on questions of food, chemical and product safety. The BfR conducts its own research on topics that are closely linked to its assessment tasks.

This text version is a translation of the original German text which is the only legally binding version.