

WHAT PRECISELY DOES MY DINNER CONTAIN?

How EuroFIR harmonises food composition data

The project: Promoting standards in food composition

Several hundreds of thousands of food products are on the market. These include fruit and vegetables, meat, fish and milk as well as crafted and processed foods ranging from noodles and yoghurt to highly composite products such as ready-to-eat-meals and complex dishes with sauces and other ingredients. It goes without saying that consumers, retailers and producers want clear-cut definitions of foods and their sub-categories, i.e. what distinguishes white from dark/brown bread, what are they made from and which nutrients they contain.

To date, only national food tables have been used to gain insights into food composition but each uses different definitions and methods of analysis. EuroFIR AISBL, an international, member-based, non-profit association under Belgian law was set up in 2009 as a successor to several EU-funded projects, offering a global perspective.

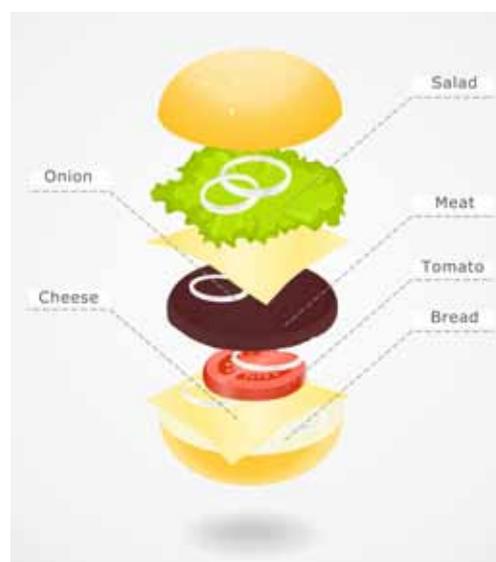
EuroFIR's purpose is to develop, manage and exploit food composition data, and promote international cooperation in best practice and harmonisation of standards. This cooperation has improved data quality, storage and access, and supports comparable activities among organisations with similar goals. EuroFIR is dedicated to increasing awareness and understanding of the value of food composition data and its importance for consumers, enabling them to make healthier dietary choices. EuroFIR wants to ensure sustained advocacy for food information in Europe.

The product: etools

EuroFIR AISBL members have developed four etools for different user groups to facilitate the nutrition analysis and the application of food composition information. These are:

- FoodExplorer is a new innovative interface for food composition data, which allows users to search information from most EU Member States as well as Australia, Canada and the USA simultaneously. Users have access to a wide range of data, linking foods and nutrients through harmonised data description (LanguaL), standardised components and value description with the use of EuroFIR thesauri (standard vocabularies) and associated nutrient value information. Ready for market;

- FoodBasket supports users, particularly dieticians and SMEs, with the calculation of composite and prepared foods. The user-friendly, multilingual interface enables any food composition dataset to be selected and linked to FoodExplorer. FoodBasket runs on mobile devices (e.g. smart phones and tablets) as well as desktop computers, and is fully integrated with other resources. Recipes calculated in advance can also be used as ingredients in new meals, and the results can be exported as text as well as XML-files. Ready for market;
- EuroFIR ebook collection complements existing food composition tables (online and hard copy). EuroFIR developed these in collaboration with national compiler organisations, and the data are presented in English or English and Greek, Swedish or Slovak, facilitating cross-national comparison. eBooks can be purchased online and downloaded immediately. They are fully searchable PDF files—the food composition tables are sorted alphabetically. They are presented in a user-friendly format and the data are standardised across all publications and represent the best available content in Europe. Ready for market;
- EuroFIR elearning modules are designed to help users acquire a comprehensive understanding of the different aspects of food composition data. They are aimed at all those involved in food composition work including graduate students. The modules use animations and visuals to assist students in understanding nutrient analysis. Four major areas of nutrient analysis are covered - fats and fatty acids, proteins and amino acids, carbohydrates and fibres, and



minerals. The module includes interactive exercises that should motivate students and help them digest the information presented. The elearning modules are not designed to replace general courses on the application of food composition data but rather are designed to be an integral part of these courses. The elearning modules were created together with the Wageningen University (NL) and the software company Topshare International BV (NL). Ready for market.

The end users: Food industry, publishers, health professionals, consumers

Delivery of high quality, validated food composition information is essential to address food quality, nutrition, and public health challenges in Europe. Users of EuroFIR products include the private sector as well as public bodies, education, and food data publishing organisations and editors.

Food and biotech industries, particularly SMEs, will benefit from standardised global data that can be used for creating and marketing new products.

Consumer organisations, health professionals and consumers rely on food composition know-how, including access to tools for the delivery of digestible information such as nutritional content for dietetic planning and health management for families and individuals.

Research organisations and funding bodies benefit from provision of standardised international food composition information that supports research and helps with responding to project calls and procurement.

Regulators and policy-makers depend on reliable data to make informed choices in law-making.

The inventors: A network of food research organisations

The Institute of Food Research in Norwich (UK) coordinated the first EuroFIR Network of Excellence, which was funded by the EU 6th Framework Research Programme (EU FP6, 2005-2010) building on 25 years of collaboration and sustained activity in food composition research across Europe.

In the early 20th century, demand for information about nutrient content led to the creation of national food composition tables, which are still used to develop diets with specific nutrient content in clinical practice, to determine emergency food supplies, and to assess the nutritional value of foods consumed by individuals and the wider population. EuroFIR has provided the first comprehensive pan-European food information resource, which has allowed for effective management and improved functionality including the comparison of data across sources and amongst countries.

The follow-up project, EuroFIR NEXUS (EU FP7, 2011-2013), sought to consolidate earlier developments; to further implement and refine these resources to support food and health research in Europe; and to increase awareness, application and exploitation of national food data and the wider implementation of standards and best practice.

As a third step, EuroFIR AISBL, now a financially independent organisation, aims to be the best and only independent broker of validated food composition information in Europe, facilitating improved data quality, storage, access and delivery, and encouraging better application of food composition data through harmonisation and training.

Development stage: Ready for market

All four etools are developed and ready for market.

Previously, EuroFIR has focused its marketing activities among project beneficiaries and users, including national food composition database compiler organisations, researchers, and dieticians. With established products and services, EuroFIR wants to move its focus towards potential customers and/ or partners with whom they can:

- Develop, maintain, or improve marketing of existing tools and resources;
- Secure further investment to enhance the existing infrastructure, and;
- Develop new tools/ platforms that anticipate the future food composition information needs of European research areas and food and biotech industries.

Policy impact: Address public health challenges

EuroFIR AISBL is the only EU-wide independent food composition resource bringing together food composition datasets from 26 European Member States, Australia, Canada and the USA at a single point of entry, as well as working alongside FAO INFOODS outside Europe. EuroFIR is recognised as an independent resource and promotes trust throughout its proven network of contacts, facilitating access and cooperation among national food composition database compiler organisations and other key users including the food industry, education, and policy-makers. While the commercial potential of food information is limited—these data will be freely available—there is an increasing demand to support its interpretation and application in research and/or clinical practice, which is essential if governments globally are to address public health challenges e.g. energy intake.

Next steps: Promotion

The key objectives for EuroFIR AISBL in 2013-2015 are to:

- Support, facilitate, and promote the compilation of validated and documented food composition data by national food composition database compiler organisations in Europe and globally;
- Develop and implement the EuroFIR Food Platform, embedding it in the wider European food and health research infrastructure (RI);
- Promote and deliver training and continued professional development (CPD) for food composition researchers and students, and other target stakeholders and users (non-member compilers);
- Provide a forum for networking and information exchange, and new funding streams for food composition and nutrition researchers, food analysts, industry professionals, and other stakeholders and users;
- Represent and lobby to increase visibility/awareness, impact and promotion of the importance of food composition research among key stakeholders and users.



EuroFIR

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