

EuroFIR

EU research unveils food products nutrient composition on the supermarkets' shelves

Online food composition databases providing information on the nutrient and non-nutrient content of raw foods or prepared and composite foods

European food composition databases publically accessible online containing information on the nutritional composition of foods have been standardised and harmonised within the European research project EuroFIR. The project, funded under the EU Sixth Research Framework Programme with 12 million Euro, allows scientists and consumers to check the nutrient composition of products: from fresh tomato to pre-packed pasta's. To broaden the list of products analysed and more transparency several big private companies have been involved.

EuroFIR provides the first comprehensive pan-European food information resource. Thanks to the project EuroFIR eSEARCH, (<http://esearch.eurofir.org/>) it is easy to retrieve detailed information on the nutritional composition of foods, for example the Vitamin C content in a tomato (17mg/100g) or the energy value of a raw grapefruit (131kj/31kcal*), but also the nutrient content of 100g of baked beans in tomato sauce on the supermarket shelves (4.8g protein, 0.6g fat, 15.1g carbohydrate, 5.8g sugar and 92.9g water).

The project has created a network of information, available for all the consumers, collecting and interlinking twenty-six authoritative European Food Composition Databases (FCDB) containing more than 50,000 data points.

EuroFIR also provides EuroFIR eBASIS (<http://ebasis.eurofir.org/>), which is an Internet deployed food composition and biological effects database for plant-based bioactive compounds with putative health benefits. Over 300 major European plant foods are listed and information on 17 compound classes (e.g. phytosterols, polyphenols, glucosinolates and lignans) is provided covering multiple bioactive compound classes and plant foods, with data sourced from peer-reviewed literature.

Data reporting from EuroFIR eBASIS uses a sophisticated data retrieval software system, searchable by compound, food or biological effect, allowing users full control over the data selected for output. Outputs can be downloaded as spreadsheets, allowing the user to perform calculations, create graphs and manage the data as required. The database represents a unique comprehensive resource on bioactive compounds for researchers, health professionals, health educators, the food industry and policy makers.

Additionally, a project funded by the European Food Safety Authority (EFSA) has allowed the inclusion of information on the toxicity of plant foods, which is available via a linked database. This information is available together with figures on bioactive compounds with effects on human health.

Furthermore, traditional and ethnic foods have been analysed to define their characteristics, nutritional composition, and preparation methods. This is important for helping to ensure continued existence of these foods and to preserve their place in each country's culture. As regards traditional food, information was gathered in 13 European countries: Austria, Belgium, Bulgaria, Denmark, Germany, Greece, Iceland, Italy, Lithuania, Poland, Portugal, Spain and Turkey. For ethnic food, the project researched, collected and studied 131 foods from Asia, Africa, the Mediterranean region, Turkey, Romania, Latin America and Surinam.

A committee on Food Composition Data was launched in 2008. The committee, which will develop the new standard for food composition description, is led by Swedish Standards Institute (SIS) and the Swedish National Food Administration (NFA). EuroFIR has contributed to recommendations that form the basis of this framework

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