EDB
Eaternity Database

A comprehensive LCA food database

Since 2009 Eaternity has built a peer-reviewed CO_2eq - database for food – the Eaternity Database. The EDB currently contains CO_2-equivalent values and unit processes for all the popular food items based on seasonality, farming procedure, transportation, conservation and processing models. We have equally developed a greenhouse model that determines the CO_2eq emissions related to the heating of greenhouses in both, organic and traditional farming. In addition, the EDB contains nutrition values and allergen information for all the products. The EDB is currently the largest and most comprehensive database to carry out CO_2 calculations of meals and restaurant purchases.

Software to measure CO_2-Emissions with a click of a button

Our software system is built to apply the data of the EDB in the food service industry. It aims to make environmental information accessible to every-day users in all the fields of the food service industry. To account for the entire processing chain, the CO_2 models for production, transportation, conservation and processing have been developed to account for the end-result in CO_2eq. Our software system links all the supplier information to their food products. When we encounter missing supplier information, we have established an algorithm that is built to estimate the contributing factors based on trade standards.

Enhance sustainable food choices

The combination of the EDB with our software system is an excellent tool to educate in, measure and develop the awareness for a sustainable food supply chain. It forms the foundation for informed decision-making, scientific research and the establishment of climate-friendly and healthy food choices.

Scientific collaborations

The individual food CO_2eq. values (system boundary till farm gate or industry gate) are the result of our collaboration with scientists from ZHAW – Zurich University of Applied Sciences www.zhaw.ch/IUNR/agri-food (scientific development by ZHAW, IT implementation by Eaternity) and Quantis – World Food Database (http://www.quantis-intl.com), University of Zürich (UZH), Swiss Federal Institute of Technology in Zurich (ETHZ), Research Institute of

Organic Agriculture (FiBL), ecoinvent v3.2 (www.ecoinvent.org), Agribalyse (www.ademe.fr), Agri-footprint (www.agri-footprint.com), peer reviewed literature, reports (grey literature), extrapolated or they are based on our own research subsequently adjusted to assure comparability.

To assure high data quality, comparability and comprehensiveness we:

- constantly update our data in line with the latest research findings
- harmonize data from different sources (adjust assumptions and system borders)
- carry out and finance research
- assign periodically a scientific review
- collaborate with scientific institutions and share detailed data with researchers

Sharing data and knowledge

We believe in the power of sharing data and knowledge. Our vision is to contribute to a scientific knowledge hub on food and its' related impacts. We want to contribute by providing appropriate infrastructure for data storage, management and harmonization and setting-up a governance structure for regulating publication rights and data exchange. By sharing our findings and fostering exchange we can accelerate the progress in research and jointly increase our impact.

Eaternity Vision:

Eaternity has a big appetite for change: We aim to establish climate friendly meals in society.

Your Contact:

For more information, questions, reviews or feedback concerning the database or for contributions to our LCA, please contact us.

eaternity
Pioneering sustainability for food.

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