

## One-stop shop for citizen generated consumer data on food, nutrition and health



How can we empower consumers to make healthy and sustainable dietary choices adapted to their own needs and preferences? How can we combat obesity or malnutrition without losing the sustainability perspective? To answer these questions we will create a one-stop shopping solution, called the Citizen Data Platform for food, nutrition and health (FNH). This solution consists of an app to collect citizens' generated European data on determinants and food intake and a platform where researchers can access and analyse the data. This new package offers researchers unlimited possibilities to find new insights into consumer behaviour and its impact on health and sustainability.

### Currently, finding the right and interlinked consumer data is a hard job

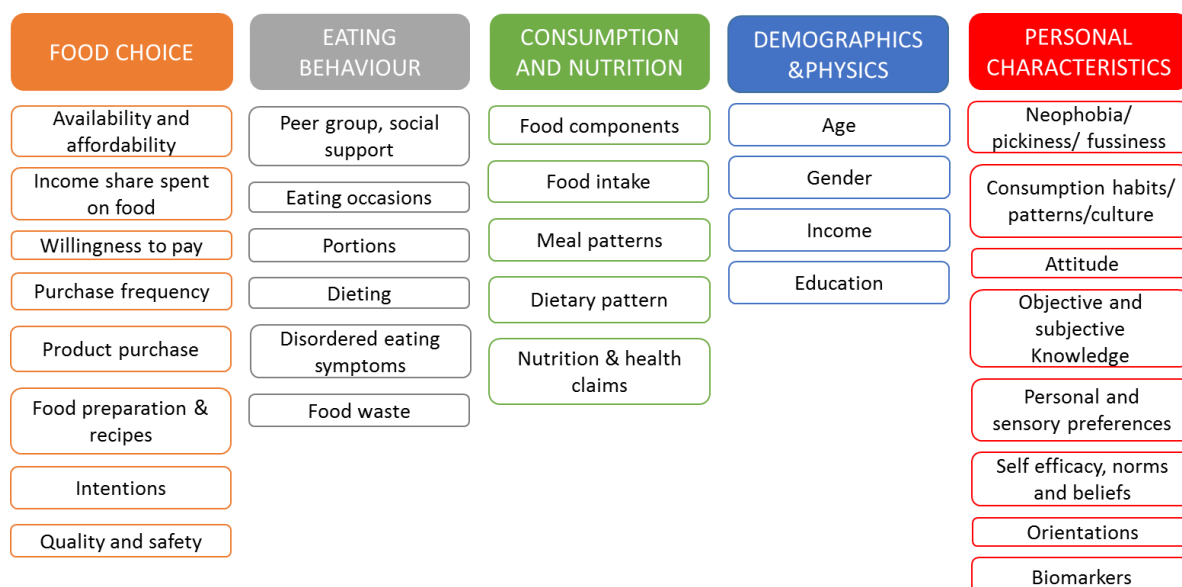
Although the relation between food, health and sustainability is a very hot topic, finding or collecting the right data on food consumption and its socio-psychological determinants still is a hard job, either by re-using data or collecting data yourself. Data are often fragmented, national and project-driven, not standardised or harmonised across countries and therefore of limited value. Data on food consumption often tends to focus on either dietary intake or socio-psychological determinants rather than a combination of both research domains and they are often collected in experimental settings instead of in real life settings. On the other hand, the choice to collect data yourself is not straightforward. It is a time-consuming process which might delay your research and for many researchers it is complex due to many regulations related to data collection and storage (FAIR, new regulations on privacy and data security, open access). For many researchers, complying with all these rules is not a topic that they get very enthusiastic about. Finally, filling in detailed questionnaires on food makes it hard to find sufficient respondents.

### Imagine all relevant consumer data at one central spot

Imagine you want to compare dietary behaviour and eating patterns of European female citizens between 20 and 30 years to analyse the sustainability and health of their diets. How can we use modern techniques to measure behaviour and intake near time and on the spot? Where do you find such data all over Europe in a standardised and harmonised way? When by outlining your research proposal and thinking about the data needed, you can start by looking at the FNH Citizen Data Platform on the Internet. It appears that data on dietary intake and socio-psychological determinants can be collected simultaneously in real-life settings.

The FNH Citizen Data Platform is a useful and accessible e-platform to share data and integrate information about citizens. There you can find information on committed citizens all over Europe providing standardised and harmonised data on demographics, consumer behaviour, food intake, human nutrition and physical activities and other relevant data. This platform is intended to grow to 100,000 citizens by 2027. These data are collected with the harmonised research app.

---



### Basic data Citizen Data Panel - Determinants of behaviour and consumption

The data are collected near time and on the spot, providing a wealth of information on food choices in real life. Data are collected over longer periods of time, which makes it possible to detect trends. The FNH Citizen Data Platform will dynamically 'profile' the European citizens using the app by applying state-of-the-art data analytics techniques and machine learning. The app will also ask citizens for an authorisation to make the individual data from other apps (e.g. Fitbit, Myfitnesspal) on their smartphone available. In addition to this, the app also makes it possible to collect additional data on food, by using the modular system to add additional research questions. Although the panel is not a representative sample, it provides insights into consumption patterns and dietary habits on health and sustainability.

Current situation		Future situation	
Re-use of data <i>Fragmented and</i>	Collecting data <i>Time consuming</i>	Re-use of data <i>one entry point</i>	Collecting data <i>standardised method</i>
<i>Not standardised</i>	<i>Complex (regulations)</i>	<i>FAIR</i>	<i>flexible modules</i>
<i>Not harmonised</i>	<i>Difficult finding respondents</i>	<i>standardised</i>	<i>consents arranged</i>
<i>Limited value</i>		<i>harmonised</i>	<i>panel available</i>

### Interested in consumer behaviour and dietary intake?

Academic and other public researchers will have access to the FNH Citizen Data Platform through an online portal. The data can be analysed through remote access in a micro-lab setting (meaning you can do all the analysis and see the individual data, but not take them out). Also private researchers can use the portal for their analyses. Their access is limited to pseudonomised data. In this way the platform complies with all regulations on fair use of data. In both cases, the access is restricted to members and a fee will be charged.

### How to join the platform

The FNH Citizen Data Platform is part of the new Food, Nutrition and Health Research Infrastructure (FNH-RI). We are developing this new platform and corresponding collection app in an agile way and are in search of extra use cases. Are you looking for new consumer insights and do you have challenges with your data collection? Contact us to find new ways.

#### Contact

Wageningen University & Research  
PO Box 29703 | 2502 LS Den Haag

T +31 70 335 8494  
E [fnh-ri@wur.nl](mailto:fnh-ri@wur.nl)

**WWW.FNHRI.EU**