

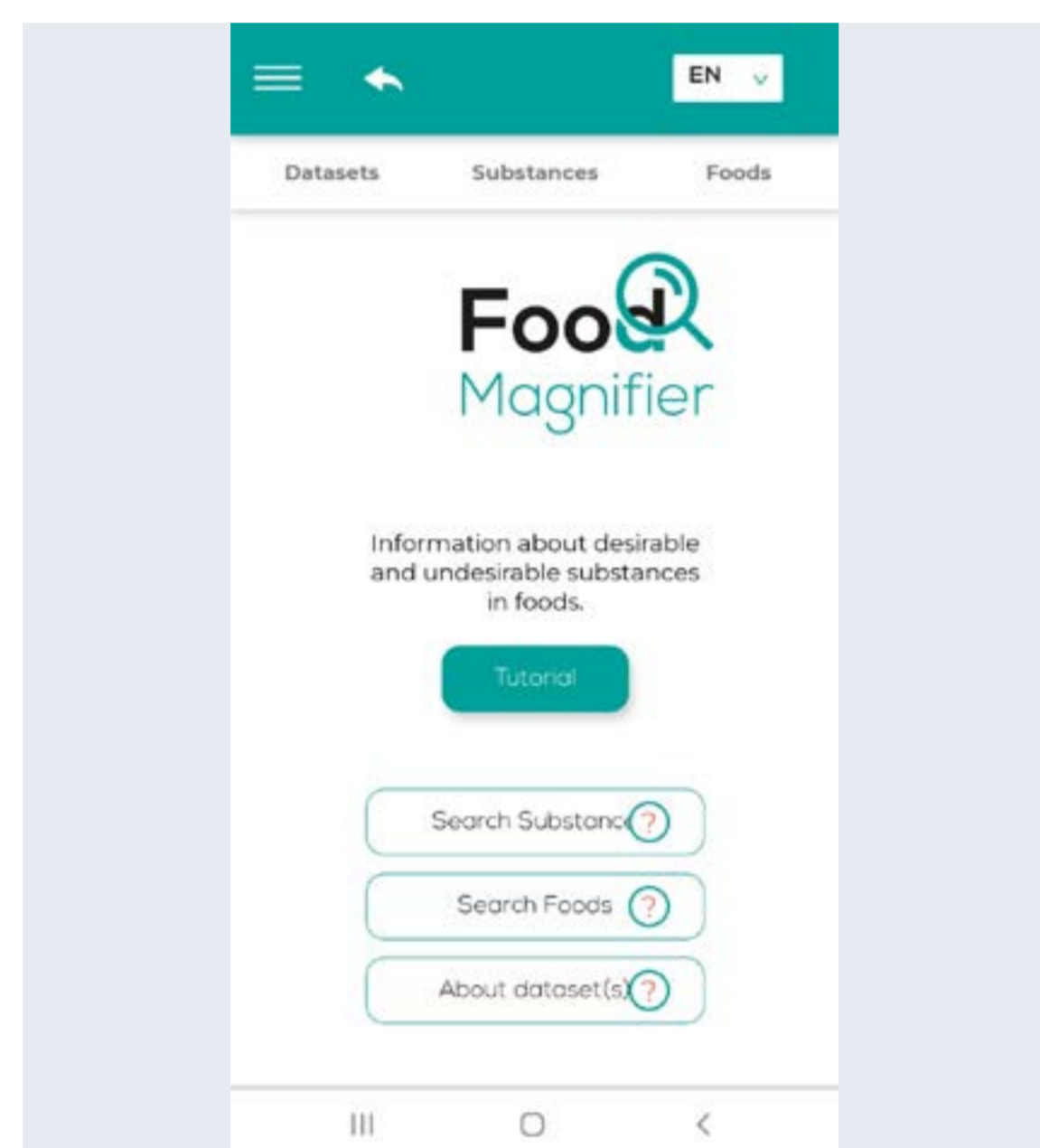
# FoodMagnifier App Contaminants & Nutrients in Food



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## Background

- Many apps provide information about nutrients in food with the aim of positively influencing dietary choices
- So far, there is no app that also provides information on potentially undesirable substances
- Communicating food-related risks is a particular challenge

## Objective

- Transparent communication of data on potentially harmful substances
- Positive influence on diet by reducing the intake of undesirable substances
- Target group: Interested public and other stakeholders (e.g. risk managers)

Go to FoodMagnifier by scanning the QR code



## Methods

- Development within the FNS-Cloud project<sup>1</sup> (2019 – 2023)
- Basic structure based on Total Diet Study (TDS) methodology
- Example data: German pilot TDS (TDS-Exposure-Project<sup>2</sup>)
- Selected substances: aluminum, lead, copper, manganese and mercury
- Usability Test 1 – project partners (N=14): Technical implementation, comprehensibility (2022)
- Usability Test 2 – German speaking end users (18 - >65 years) (N=42): Technical implementation, comprehensibility, risk communication (2023)

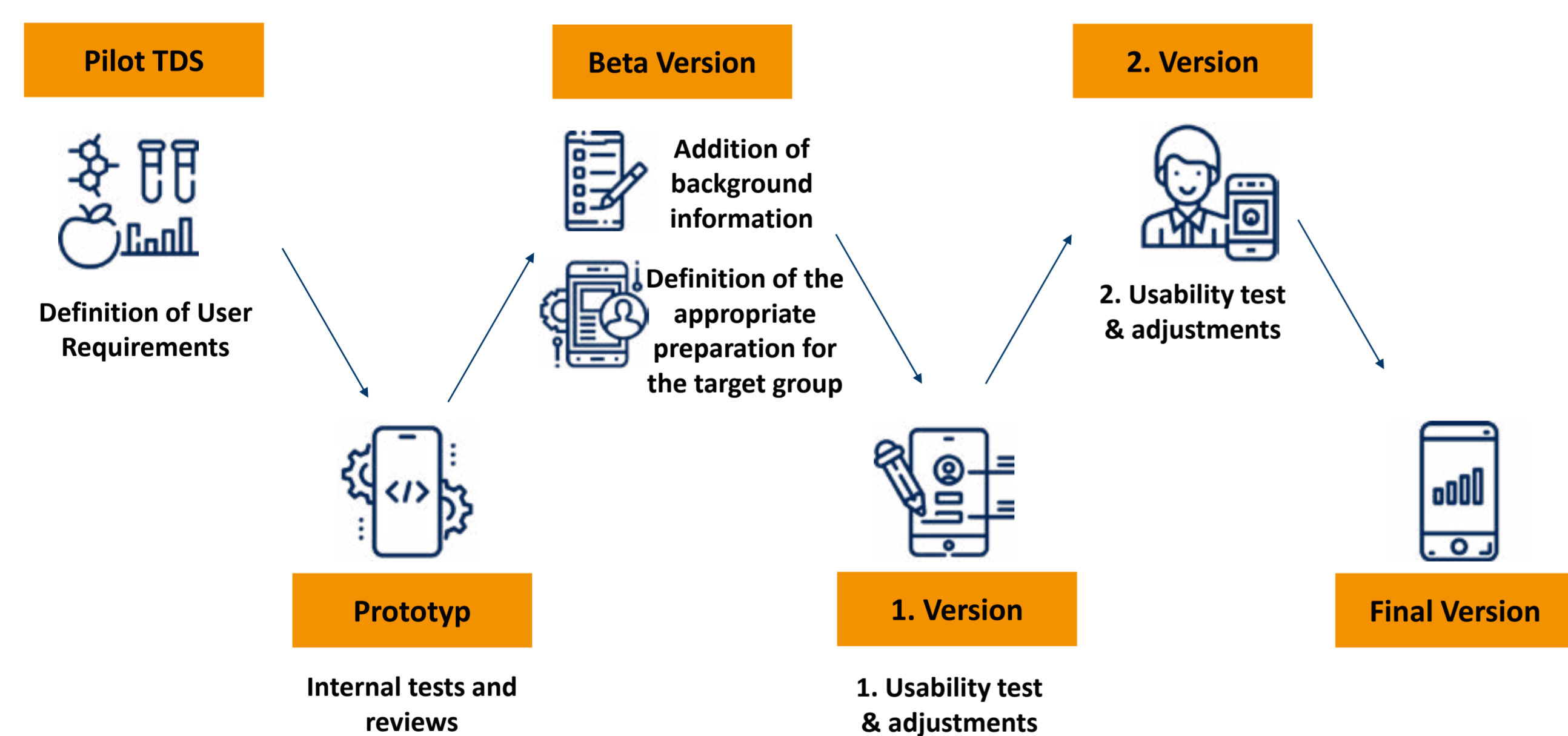


Fig 1: Development steps of the FoodMagnifier app.

<sup>1</sup> [www.fns-cloud.eu](http://www.fns-cloud.eu)  
<sup>2</sup> [www.tds-exposure.eu](http://www.tds-exposure.eu)

## Result: FoodMagnifier app

- Available at [www.foodmagnifier.eu](http://www.foodmagnifier.eu)
- Search functions for substances or (prepared) foods
- Comparisons between foods or substances
- Background information on substances and population intake levels, as well as further literature (Fig. 2)
- Online tutorial and in-app help functions (Fig. 3)

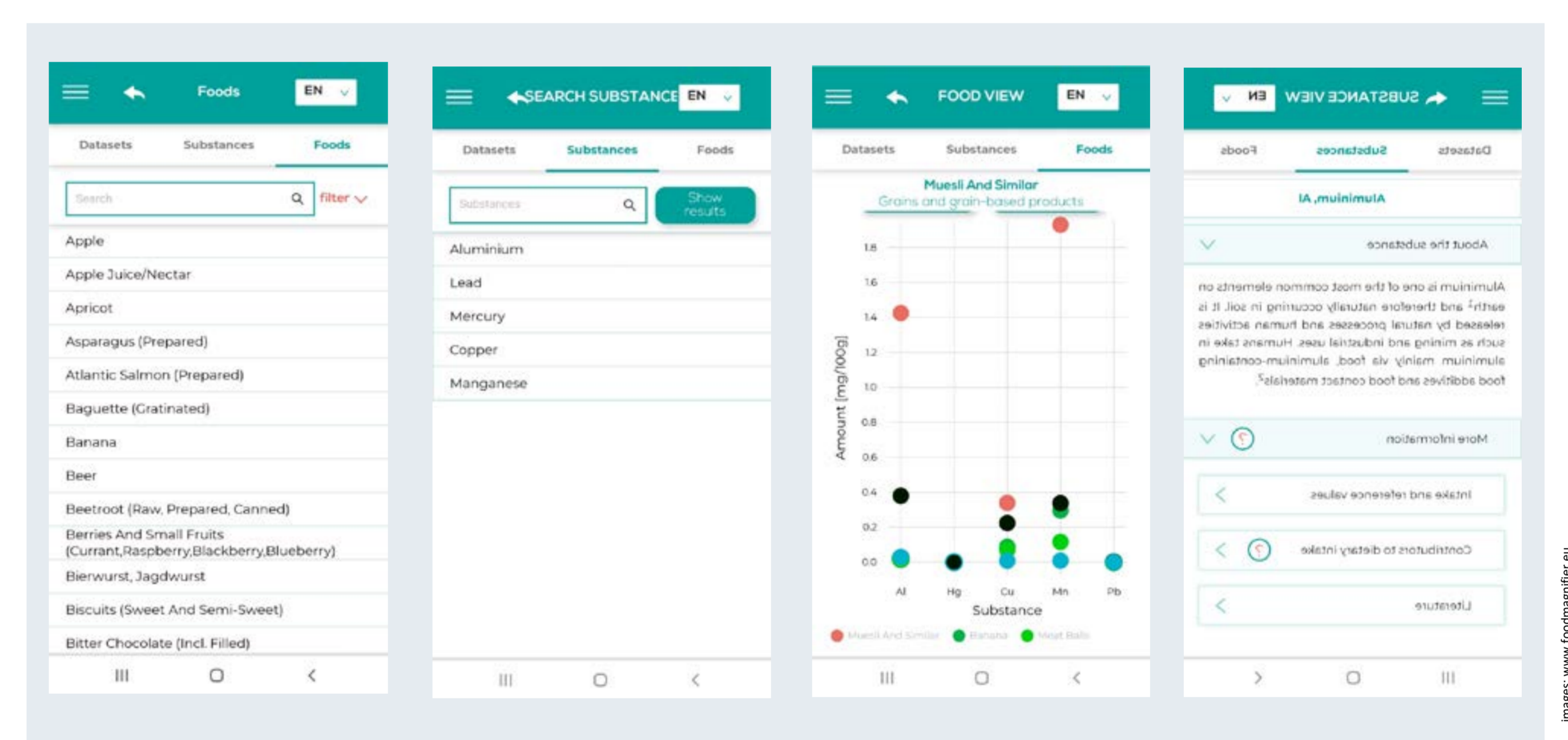


Fig. 2: Selected screenshots of the FoodMagnifier app (from left to right: food search, substance search, food/substance comparison, background information on the context of the content of substances with the risk assessments).

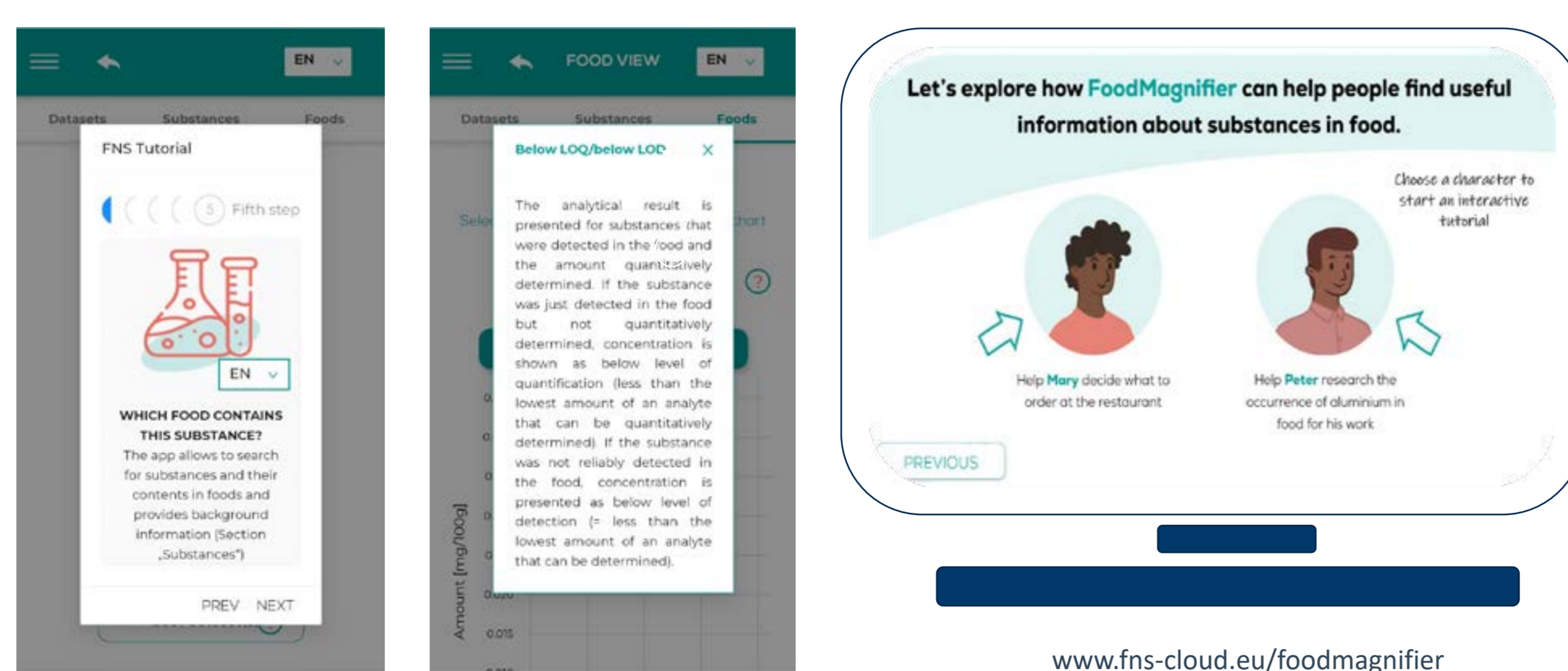


Fig. 3: Selected screenshots of the help functions in the FoodMagnifier app (from left to right: Getting Started tutorial (in-app), context-related help buttons ("?") (in-app), interactive online tutorial with two application scenarios).

## Conclusions

Development of an application that

- makes data on (undesirable) substances in food accessible to the general public
- presents complex information on levels of potentially hazardous substances in a contextual and comprehensible way

## Outlook

- Use by other data owners (TDS data)
- Further development for further content data (e.g. monitoring data, nutrients)
- Further development for more complex applications (e.g. individual exposure)