Quisper - Quality information services for personalised nutrition and lifestyle advice

Introduction
Quisper is a result of the FP7-funded project QuaLiFY (Quantify Life – Feed Yourself, Grant no. 613783). The objective of QuaLiFY was to valorise results from preceding and on-going EU-funded projects in the area of nutrition and health, such as EuroFIR, EuroDish, Eurreca, Eurogene, NuGO and Food4Me. The latter, in particular, focused on the opportunities and challenges presented by personalised nutrition, and “how we can best use our current understanding of food, genes, and physical traits to design healthier diets tailored for each individual”. QuaLiFY is coordinated by RTDS (AT).

Quisper has emerged from an open innovation and collaborative business development process amongst a group of research and technology organisations (TNO, JSI and IFR) and SMEs active in the domain of personalised nutritional advice and related services (23ième Homme, FoodWizz, IPH, Safecape, Sonce, Swiss Analysis, The Hyve, Vitas, VivSan, NuGO, and EuroFIR), which was facilitated by shiftN (BE).

Purpose, strategy and vision of Quisper
The purpose of Quisper is to enhance health of the public by organising, developing and exploiting an independent and scientifically-sound digital information platform as a support tool for creating marketable personalised nutrition and lifestyle advice services as well as for research in the area of health oriented dietary behaviour change and the role of personalising nutrition and lifestyle advice.

Quisper envisages a future where all people are more conscious about what they are eating and how it affects their health, and aims to ensure scientific data and knowledge rules are used to provide personalised advice rather than pseudo-science or faddy-diets.

Our strategy is to become the first and remain the preferred service offering scientifically-validated information for personalised nutrition service development by companies/organisations offering dietary and lifestyle advice to citizens and/or research.
The Quisper concept

Quisper is a digital information platform interfacing with suppliers of data and knowledge rules useful for building personalised nutrition and lifestyle advice, and users that retrieve such information to create personalised nutrition and lifestyle advice services for consumers and patients or to conduct scientific research.

For suppliers, Quisper offers an opportunity to share and add value to their data and knowledge rules with a wider group of potential users, be it researchers or business. For users, it offers a convenient one-stop shop where all the necessary and scientifically-valid data and knowledge rules are available through a single interface with the added assurance coherence amongst the various sources.

Quisper intends to expand the existing offerings with additional data and knowledge rules, and further elaborate knowledge rules by combining these to create integrated approaches.

Quisper will make substantial efforts to promote and disseminate the platform to a wide audience of industrial, research and societal communities in the areas of food, dietetics, health, wellness and performance. In addition, it will facilitate cooperation between users and providers by organising information sessions to enhance use and stimulate further development.

Through a Scientific Validation Team consisting of six independent experts, Quisper will assure that all data and knowledge rules made available through the platform are properly validated. This includes verifying that scientific procedures have been applied in research as well as in maintaining data and knowledge rules provided by suppliers.

It is this combination of a coherent information source with scientific-validation with easy access that makes Quisper a unique proposition for service providers in personalised nutrition.

Quisper will offer support services, helping users to understand what data and knowledge rules are available and how they can be used for their personalised nutrition services or research. These support services will include links to Quisper members that provide biomarker (blood) and DNA analytical services and deliver the results through Quisper.
Data and knowledge rules offered by Quisper

At the start, Quisper will offer two extended databases and four knowledge rules.

The databases are provided by EuroFIR AISBL and include food composition data from 28 countries, and dietary reference values for Germany, Austria and Switzerland, the United Kingdom, Italy and the Nordic countries. EuroFIR AISBL is, as a provider, responsible for maintaining and expanding the data.

Four of the knowledge rules are developed fully, either by SME members (IPH, Swiss Analysis and Safecape) or Food4Me. Each has a specific purpose and can be used independently or in combination. The following briefly describes each of the 4 algorithms:

- **IPH and Food4Me knowledge rules** are currently available for only a few countries. Quisper is developing the necessary coherence for other national country datasets.

- Work is being done to further expand the services with the additional of a database of recipes, food pictures and portions, and two additional knowledge rules: one providing dietary advice based on a combination of biomarkers and genes and another that translates dietary advice into a menu-planner for one or more weeks (as explained below):
The importance of Scientific Validation

Given that at present there is still apparently conflicting information in the area of nutrition and health advice (for many reasons), it is essential for any new approach to be based on sound scientific approaches. Quisper will assure that all data and knowledge rules made available through the platform have been through verified scientific procedures. Moreover, Quisper will assure that all the different information sources are harmonised in terms of content and definitions to provide maximum complementarity. Finally, Quisper will also ensure that each information source respects its responsibility for maintenance and updating of data as scientific knowledge progresses.

Legal structure of Quisper

Quisper has been set up with a societal vision and mission, i.e. improve public health through better nutritional advice. Its services are pre-competitive and, therefore, must be available to everyone at an affordable cost. For this reason, the legal structure of Quisper will be an international non-profit association, probably based in the Netherlands. Users of the platform, providers of data, and knowledge rules or servicers, as well as other organisations supporting the purpose of Quisper, can become members of the Association. There will be several types of membership available depending on levels of engagement. Full members will have voting rights in the General Assembly, which governs strategic decisions, finances and personnel, and appointments of members of the Executive Board, the Executive Director and Secretary and admittance to full membership.

QuaLiFY is the project from which Quisper has emerged

QuaLiFY combines the results of former FP6- and FP7-funded project in health and nutrition to build a concerted platform for European SMEs to mature these developments. QuaLiFY creates a solid basis for commercial activities in the area of personalised nutrition by providing a data- and information infrastructure and harmonized open innovation protocols.

This project has received funding from the European Union’s Seventh Framework Programme for research; technological development and demonstration under grant agreement no 613783.