PROJECT FACTSHEET

LIFANA

Improve health and well-being through personalized meal recommendations and reduce the effort of daily food-related tasks for end-users and their support persons by integrating grocery delivery services and smart shopping lists.

Inspiration

Many elderlies suffer from malnutrition that can cause (or be caused by) chronic health conditions, such as diabetes type 2, high blood pressure, cardiovascular diseases, stroke or even osteoporosis. Through appropriate adjustments in their diets, on the basis of personalized nutritional advice from nutritionists, the burden of established diseases as well as the risks of developing further conditions can be diminished.

In this context, the LIFANA project aims to reduce the effort of daily food-related tasks for end-users and their support persons by integrating the meal-recommendations with recipe databases, grocery delivery services and smart shopping lists.

Innovation

The objective of LIFANA is to develop and evaluate a software application called the LIFANA Nutrition Solution that supports healthy nutrition through all phases of ageing, from active seniors to elderly users and patients in need of daily care. It will recommend meals for a whole week based on the user's preferences, such as culture, taste, and budget, but more importantly on personal advice provided by professional nutritionists. The objective is to include dishes that are nutritionally appropriate on their own and that the user likes. Depending on the individual abilities and situation of the user, the package will further support shopping tasks for self-cooking, coordination of shopping tasks with informal carers, such as family members, and grocery delivery services.

The project integrates software components for meal recommendation and shopping assistance, as provided by LIST and Fraunhofer Portugal, into the GoLivePhone® mobile application that addresses the needs of elderly users. It is developed and distributed by our SME partner Gociety Solutions® from The Netherlands. As the project leader, LIST contributes its WikiFood platform, which includes microservices for (i) natural language processing of ingredient lists with detection of synonyms, (ii) a knowledgebase of 651 defined food hypersensitivity-related substances and a food-class hierarchy, and (iii) tools for data quality assessment of food-product information and information extraction.

Impact

Individual meal recommendations based on personal advice from professional nutritionists and integrated with decision support in the supermarket will assist the users to change their eating habits in order to maintain a healthier lifestyle. LIFANA also addresses socio-economic aspects by taking advantage of promotional offers from retailers. In Switzerland, the LIFANA Solution will be adapted by our clinical B2B partner Cereneo to connect discharged patients at home with nutritionists for nutrition advice.

The project team expects significant improvement of well-being and a reduced risk of malnutrition during the field trials with 280 participants in three countries. The project business partner Gociety Solutions intends to make the results of the project LIFANA widely available as additional module in their existing GoLivePhone software suite as soon as possible after the project ends.

Partners

Luxembourg Institute of Health (LU) , Fraunhofer Portugal (PT) , SONAE (PT) , Santa Casa da Misericórdia do Porto (PT) , Gociety Solutions (NL) , Unie KBO (NL) , CERENEO (CH)

Contact

5, avenue des Hauts-Fourneaux
L-4362 Esch-sur-Alzette
phone: +352 275 888 - 1 | LIST.lu

Dr Christoph STAHL (christoph.stahl@list.lu)
© Copyright April 2024 LIST

LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY

LIST