



nutrishield

Welcome to the third
NUTRISHIELD e-Bulletin!

Issue 3 / April 2021

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Key Facts

Grant Agreement:

No 818110

Call:

H2020-SFS-2018-1

Start date:

01 November 2018

Duration:

48 months

Coordinator:

Alpes Lasers SA



Project Overview

NUTRISHIELD is an innovative solution, providing personalised nutrition advice and support that will assist people in achieving their optimal health and well-being and adopting long-term healthy and sustainable diets.

NUTRISHIELD aims to integrate laboratory techniques, methodologies, ICT devices & applications, algorithms and other components into one platform and validate it in clinical conditions.



The Challenge

To create a platform that

- promotes safe food for the population,
- enables consumers to make informed choices and
- ensures that the proposed choices will have good chances of being adopted

Assist consumers understand:

- why each food is being suggested,
- what implications each choice may have



Expected Impact

- Empowered consumers able to make healthy and sustainable dietary choices
- Personalised diets upon scientific-based dietary assessment and advice
- Increased consumer trust in personalised nutrition advice and/or support
- Prevention of diet-related and non-communicable diseases
- Quality-Of-Life, Health and Safety of the citizens

Latest Articles in Our Blog

Nutrishield: A Personalised Nutritional Approach To Prevent Diabetes In Children By Modulating The Gut Microbiota

Diabetes affects 140,000 children in Europe with an annual increase of 21,600 new cases and a dramatic socio-economic impact [1]. In most cases, diabetic children are affected by Type 1 diabetes (T1D), an autoimmune disease characterized by increased glycemia caused by the destruction of insulin-producing pancreatic islets, which are destroyed by patients' own immune system [2]. Type 2 diabetes (T2D) has a different pathogenesis and it is related to development of insulin resistance due to obesity and sedentary lifestyle and, although it is less frequent than T1D, its incidence in children and adolescents underwent a greater than 10-fold increase over the past decade

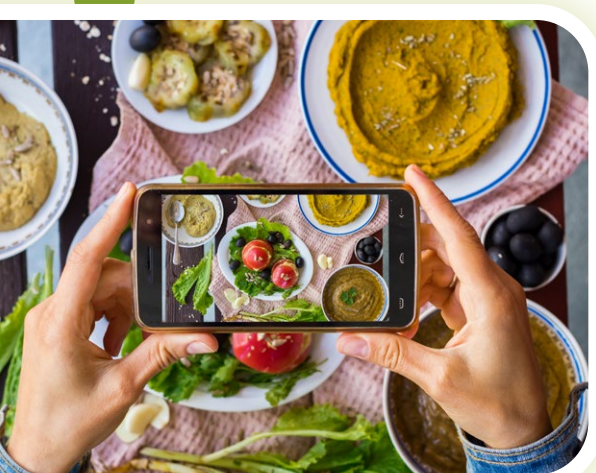
[Read the full article](#)



Food databases and automated food analysis: A quest for the holy grail

Analysis of food is mostly based on nutrition data-bases. Although some of the existing databases contain thousands up to 10 million food items but many drawbacks remain. Food composition tables struggle to cope with the large number of products and the rapid pace of change. This is beautifully illustrated by FoodDB, a database created out of Oxford University (Harrington 2019). It weekly extracts nutritional data and availability of all foods and drinks available on six major UK supermarket websites since November 2017.

[Read the full article](#)



Improving the health of new-borns through personalised nutrition for lactating mother.

The human microbiome plays a crucial role in health and growth. Microbiome composition largely develops in the first 1,000 days of life, after which it stabilises into an adult state. The first 1000 days are thus a critical 'window of opportunity' for modulation of the microbiome to induce lifelong health benefits in infants. Breastfed mother's milk is perhaps the most important modulator of the microbiome during this period. It has been suggested that between 25-30% of the human microbiome originates from mother's milk.

[Read the full article](#)





Nutrishield Dashboard and Backend System by Vertoyo

In the next few lines, we'll attempt to introduce you to the technical world of NUTRISHIELD program and give you an overview of NUTRISHIELD's Dashboard and Backend System. The Dashboard is the main web application and the place to be for medical personnel as it enables them to have easy access to all patient-related available information. It also aims to help doctors to prepare the dietary and activity plans.

[Read the full article](#)



Nutrition Education During COVID-19 Pandemic: The Advances Of Digital Health, More Important Than Ever.

The closing of schools and the turn to food orders create dietary and physical activity challenges for children. An increasing number of investigators stress the argument that continuous lockdowns due to COVID-19 pandemic – that restrict children from attending school – will exacerbate the risk factors for weight gain, in a similar way as summer recess makes homes stocked with ultra-processed and energy dense food products.

[Read the full article](#)



Unravelling the Dynamic Interactome of Human Milk Vitamins

Nutritional patterns, the quantitative profile of nutrients and micronutrients that are actually consumed every day, play instrumental roles on the metabolic health trajectory from the first period of life to old age. Nutrients (carbohydrates, lipids, proteins, water) and micronutrients (vitamins, minerals and trace elements) interact at multiple levels of the biological organization from organs to cellular organelles orchestrating a complex network of biochemical processes and physiological functions.

[Read the full article](#)



NUTRISHIELD FACTSHEETS

1

What is the relationship between Nutrition and Diabetes in Children?



Click [here](#) and find out how **NUTRISHIELD** can contribute to the prevention of chronic diseases and the improvement of health!

2

NUTRISHIELD aims to find ways to improve preterm infants' health through mother's nutrition, developing a tool for providing personalised nutritional advice to lactating mothers. Check our new Factsheet [here](#) and find out more about our research!



Read Our Latest Press Release

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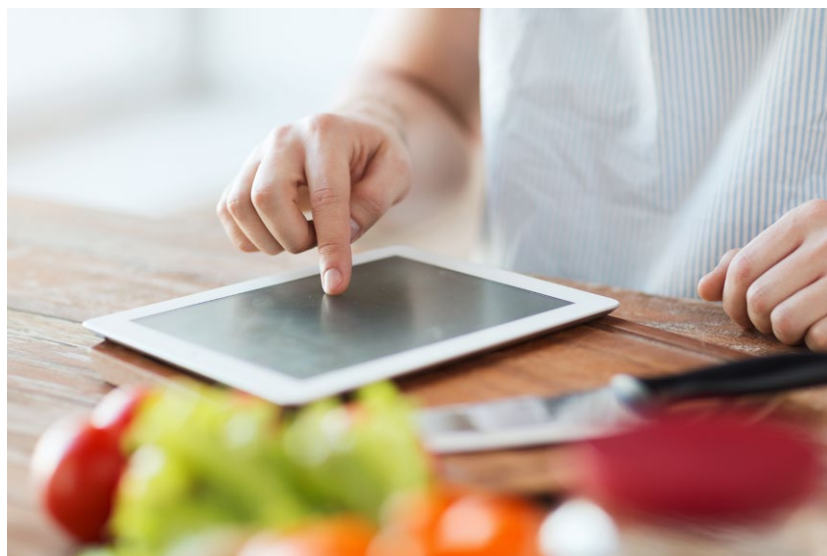
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NUTRISHIELD aims to integrate all the required elements (laboratory techniques, methodologies, ICT devices & applications, algorithms and other components) into one platform and validate it in clinical conditions, as a new tool for fact-based personalised nutrition based on monitored biomarker data and monitored food intake by actively engaging the users, thus creating the conditions for reducing diet-related health disorders.



Learn more about NUTRISHIELD's validation studies in clinical settings [here](#).



www.nutrishield-project.eu



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