



Mediterranean Enriched Diet for tackling Youth Obesity

Encontro Ciência 2022 - May 17th , 2022

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DIETA MEDITERRÂNICA
ENRIQUECIDA NO
COMBATE À

OBESIDADE JUVENIL

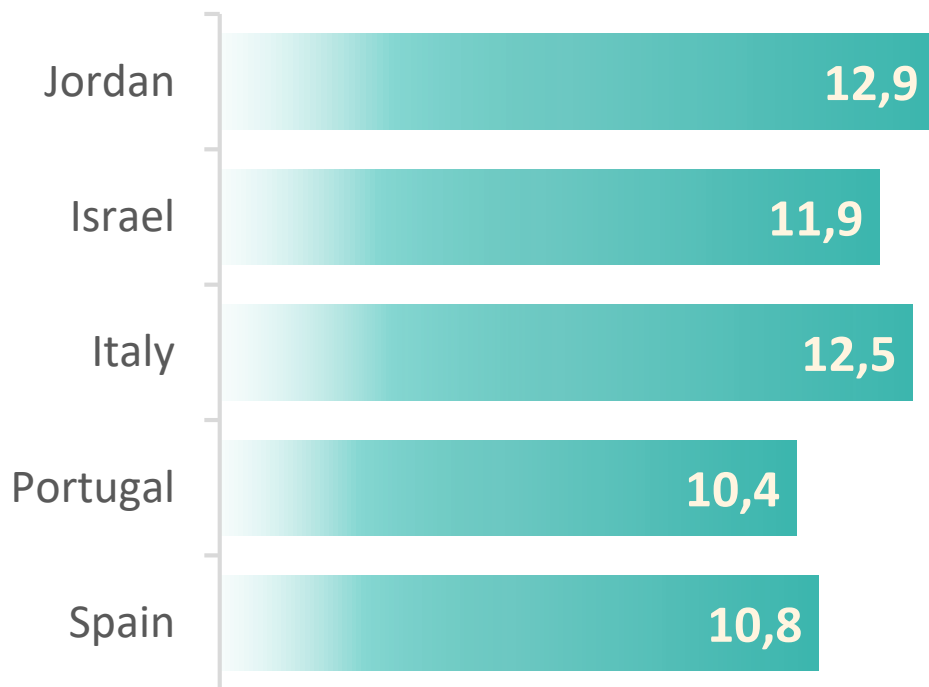
Um estudo de
intervenção orientado
para 240 adolescentes
com obesidade



THE CONTEXT

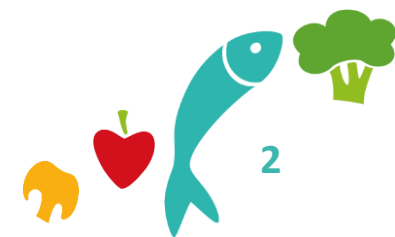


% OBESITY IN MEDITERRANEAN COUNTRIES



According to the World Health Organization, in 2016, **18%** of children and adolescents aged 5-19 suffered **obesity** or **overweight**

Source: OECD 2014 Health Statistics



CONSORTIUM

The success of MED4Youth project builds on the expertise of a multidisciplinary team of 6 partners from 5 countries

**1 Farming
Company**



2 SMEs



**Scientific
Food Center**

NOVAPAN S.L.

**3 Research
institutions**

eurecat!



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DI PARMA**





**FACULDADE DE MEDICINA
UNIVERSIDADE D
COIMBRA**





ABOUT MED4YOUTH

Tackling youth obesity with an energy-restricted Mediterranean Diet

-  MED4Youth project aims to demonstrate how an energy-restricted Mediterranean-style diet intervention is effective against youth obesity and associated cardiovascular disease risk factors.
-  The project uses omics technologies to elucidate whether the changes in gut microbiota and gut-derived metabolites are associated with the health effects of a Mediterranean Diet.

MULTICENTRE CLINICAL INTERVENTIONAL STUDIES

240 teenagers will participate in a Mediterranean Diet-based clinical study for 4 months.



MULTICENTRIC CLINICAL INTERVENTIONAL STUDY

Teenagers are participating in the study during a 4-month period and being assigned to two different intervention groups



240 teenagers from
Portugal, Spain and Italy



A Mediterranean Diet group

Instructed to follow an energy-restricted MD that will incorporate sourdough bread, pomegranate, hummus and mixed nuts.



A conventional Low-fat diet group

This diet is the most used diet for obesity treatments in adolescents. This second group will follow a diet based on a low consumption of fats.



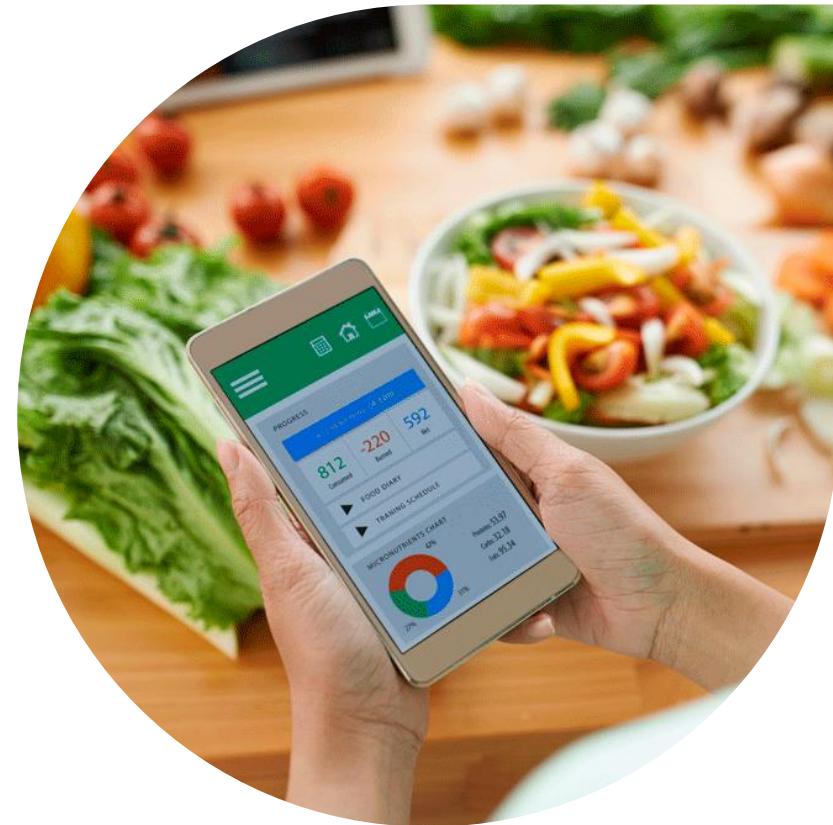
MED4YOUTH APP

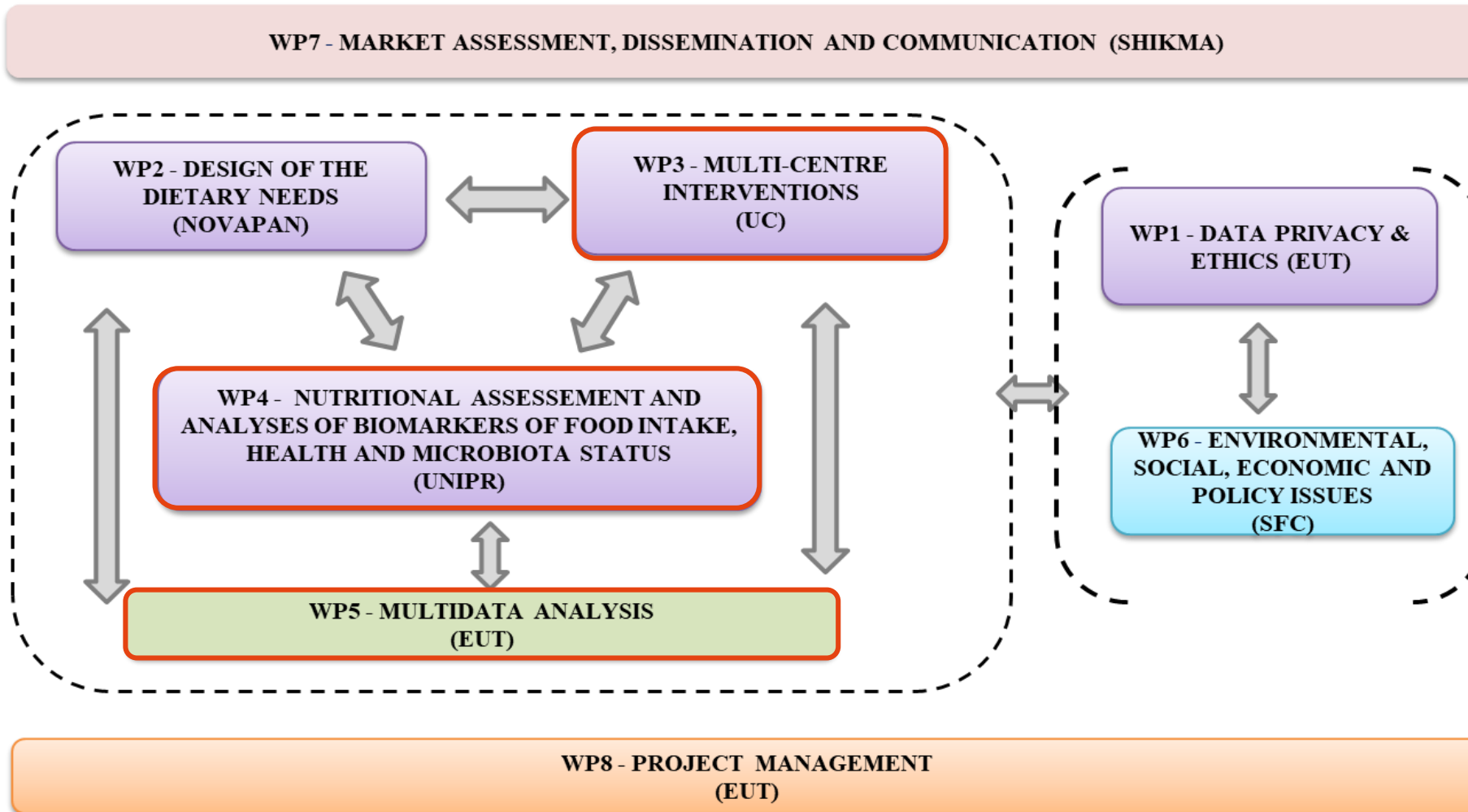
An educational web-application to encourage healthy behaviours

Teenagers participating in the project have access to an application where they can learn about **health, nutrition and food in general**.

To engage participants a **learning-through-playing** approach is being used.

- Personalised tips to improve health and nutrition habits
- Quizzes and games to improve food literacy
- Daily recipes to prepare tasty and nutritious meals
- Content on the Mediterranean Diet products





PERT DIAGRAM





IN PORTUGAL

The project involves a close collaboration between



University of Coimbra is the leader of





Work Package 3
Multicentre intervention



www.med4youth.eu

 @Med4Youth  info@med4youth.eu

IN PORTUGAL

-  Delays in approval from the Ethics Committee due to COVID
-  Difficulties in the recruitment
-  Difficulties on customs processes to receive food from Israel
-  Space available to storage the food at proper temperature



Due to COVID we got a **1-year extension**



Since March we've reached **27 families**



We are working with Cardiology and Obesity services to **increase recruitment**



Food arrived last week



4 teenagers will **start** the intervention Thursday



Mediterranean Enriched Diet for tackling Youth Obesity

Thank you

Consortium



eurecat



NOVAPAN S.L.



SHIKMA
Mishmar HaNegev • Beit Kama



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FACULDADE DE MEDICINA
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Funding bodies



ACCIÓ



Generalitat
de Catalunya



CDTI
Centro para el
Desarrollo
Tecnológico
Industrial



רשות החדשנות
Israel Innovation
Authority



MINISTERO DELL'ISTRUZIONE,
DELL'UNIVERSITÀ E DELLA RICERCA




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Supported by



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PRIMA
PARTNERSHIP FOR RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA

CONTACT US

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EXPECTED IMPACTS



Decrease the BMI z score

A decrease of 0.2 in the MD group versus low-fat group



WHO-5 Well-Being Index

10% difference before and after the intervention, which can be considered as significant improvement



Find robust associations

Between the circulating biomarkers of 2-3 specific products associated with the Mediterranean Diet



Decline waist circumference

Detect, in Mediterranean Diet group versus low-fat diet group, a 2 cm decline in waist circumference (WC)



Identify beneficial effects after the Mediterranean Diet intervention

Analysis of microbial-derived metabolites (SCFA, organic acids, TMAO, LPS, bile acids) and in microbial genera (*Lactobacillus*, *Bifidobacterium*)



KidMed Score

Achieve at the end of the study an average of KidMed Score ≥ 8 points within the Mediterranean Diet group

