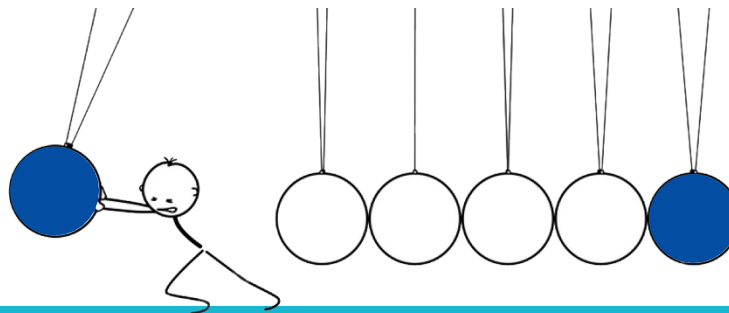


# PUBLIC REPORT Food Screening EMR (2014-2020)

*“Nutrient-rich food does not necessarily mean healthy food.”*

START PROJECT  
**2021**



END PROJECT  
**2023**

## 1

## INTRO

This project received 1330040.04 EUR funding of which 953040.03 EUR were granted by the European Regional Development Fund (ERDF).

The call for healthy food products is steadily increasing across the EU

Making food and health claims is legally challenging



It is difficult and expensive to measure nutrient levels in food products

The agricultural industry is vital for the Euregio Meuse-Rhine

### Ambitions of Food Screening EMR:



Implementation of high-TRL nutrient sensor

Provide local SMEs with insights on how to make food and health claims

Boost nutrient levels through future farming technology

To make substantive improvements in **future farming technology for healthy food, universities and SMEs** have joined forces, resulting in **Food Screening EMR**





1

1. Development of nutrient sensor technology:
  - Business case on useful nutrients for EMR relevant crops (literature study)
  - Development of 2 industrial prototypes to demonstrate the economic potential of low-cost sensors in future farming

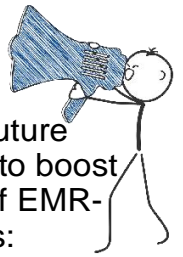
2

2. Training local SMEs on how to market their products via food and health claims:
  - Study legal framework in different member states
  - Develop decision tool
  - Organize coaching sessions to teach SMEs how to make claims



3

3. Evaluation of future farming approaches to boost the nutrient levels of EMR-relevant crops:
  - Identify relevant crops by interacting with regional food producers
  - Set-up greenhouse experiments to identify the effect of novel cultivation techniques on the nutritional level in resulting crops
  - Measure effect and summarize findings in strategic report



### 3 main results:



#### 1. Vitamin Sensor:

Portable, sensor prototype for the detection of vitamins in liquid food products



#### 2. Decision tool:

Easy-to-use algorithm that allows food producers to immediately assess if and how they can make claims on their products



#### 3. Vitamin boost by changing light spectrum:

Food Screening EMR developed a protocol to boost the nutrient level in spinach by optimizing the level of blue light in a greenhouse

#### Supporting materials for raising awareness and provision of information

1. <https://www.euronews.com/embed/1996476>
2. <https://ieeexplore.ieee.org/document/9877730>

# Key milestones



15/10/2022: Dipstick for vitamin sensing



10/12/2022: Decision tool for food and health claims



01/12/2023: Portable sensor for vitamin dipstick measurements



20/12/2023: Report on blue light treatment of spinach

## CO-FINANCERS



provincie limburg



Ministerie van Economische Zaken en Klimaat

Die Landesregierung Nordrhein-Westfalen



Wallonie

[<http://foodscreeningemr.eu/>](http://foodscreeningemr.eu/)

## PROJECT PARTNERS

### LEAD PARTNER:

 Maastricht University

### PARTNERS:

IMO-IMOMEC  
 UHASSELT

imec

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