

Success stories in food, data & innovation  
from FOODITY & DRG4FOOD Innovators

# A RECIPE FOR CHANGE



Funded by  
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**FOODITY**

# Introduction

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## Personal data sovereignty can empower citizens with more control over their food and nutrition data.

Citizens, as consumers, have the power to influence the food and nutrition value chain. However, their impact is often limited by insufficient knowledge of consumption behaviors, linked to difficulties in accessing and managing personal data that could reveal this information. While citizens value the opportunity to access their personal data, it is often locked within the platform or service used, and difficult to manage, limiting the possibility to make more informed choices.

FOODITY believes that personal data sovereignty can empower citizens with more control over their food and nutrition data, offering them valuable insights. By promoting and supporting solutions that respect personal data sovereignty, the FOODITY project contributes to raising awareness and driving change towards more sustainable food systems.

FOODITY has supported - both at a financial and business level - projects that have developed solutions using FOODITY technologies and targeting personal data sovereignty, in addition to raising awareness and driving change towards more sustainable food systems. The solutions have focused on personalised nutrition, food quality monitoring, food recognition and personalised diets, waste minimisation, and also nutrition for cancer patients.

This Success Story Booklet showcases the results and achievements of the 12 projects that participated in the two FOODITY Funding Programmes, projects that reflect the vision of the FOODITY project in demonstrating alternative paths to overcoming existing tools/platforms' limitations to citizens' rights to personal data sovereignty.



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**The FOODITY Innovators**

# DIAITA

Personalised nutrition made simple



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

Consortium

### Main project contacts

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## The project

DIAITA is a digital diet assistant that helps cancer patients and their caregivers by providing personalized nutritional guidance through the use of AI. Created by Bestiario and the Alicia Foundation, DIAITA combines human expertise and scientific evidence with technology, including a conversational chatbot interface, recommender engine, and semantic food ontology. It processes patient information, symptoms, and food preferences to generate personalized weekly meal plans and answer food-related questions. DIAITA is grounded in research and emphasizes transparency and explainability in its recommendations, while ensuring user privacy and data sovereignty through GDPR-compliant infrastructure and consent tools like DataU.

## The challenge

The DIAITA project addresses key challenges: there is a lack of personalized, accessible dietary advice for cancer patients; healthcare professionals have limited time and nutrition knowledge; nutritional and food data are fragmented; integrating food data to track and manage symptoms is difficult; and ensuring user data privacy is critical. Through expert-validated AI, user-centered design, and strong data security, DIAITA bridges clinical gaps while meeting patient needs.

## Key results

DIAITA has developed a web-based AI diet assistant that combines a curated recipe database with a personalized recommendation engine, endorsed by nutrition professionals. The assistant delivers tailored nutritional advice through a

chatbot powered by a large language model (LLM) using the NAct food ontology. It offers plain-language explanations and meal-planning tools based on users' symptoms and preferences. Data management is consent-based via the GDPR-compliant DataU platform. Patient and expert feedback has informed improvements, and focus groups have validated the tool's usability, effectiveness, and real-world relevance.

## The value

DIAITA's distinctive value lies in its personalized focus on oncology nutrition and its blend of AI-driven recommendations with expert validation. It is not a generic nutrition app—it connects patients to clinically curated food databases and symptom-specific recipes, making it especially valuable for those with complex health conditions. DIAITA uses explainable AI to promote transparency and trust, integrating input from healthcare professionals

and patients into a system built for real-world use. It empowers users by offering autonomy and choice in their nutritional decisions, setting it apart in the food-tech space.

## Increased data sovereignty

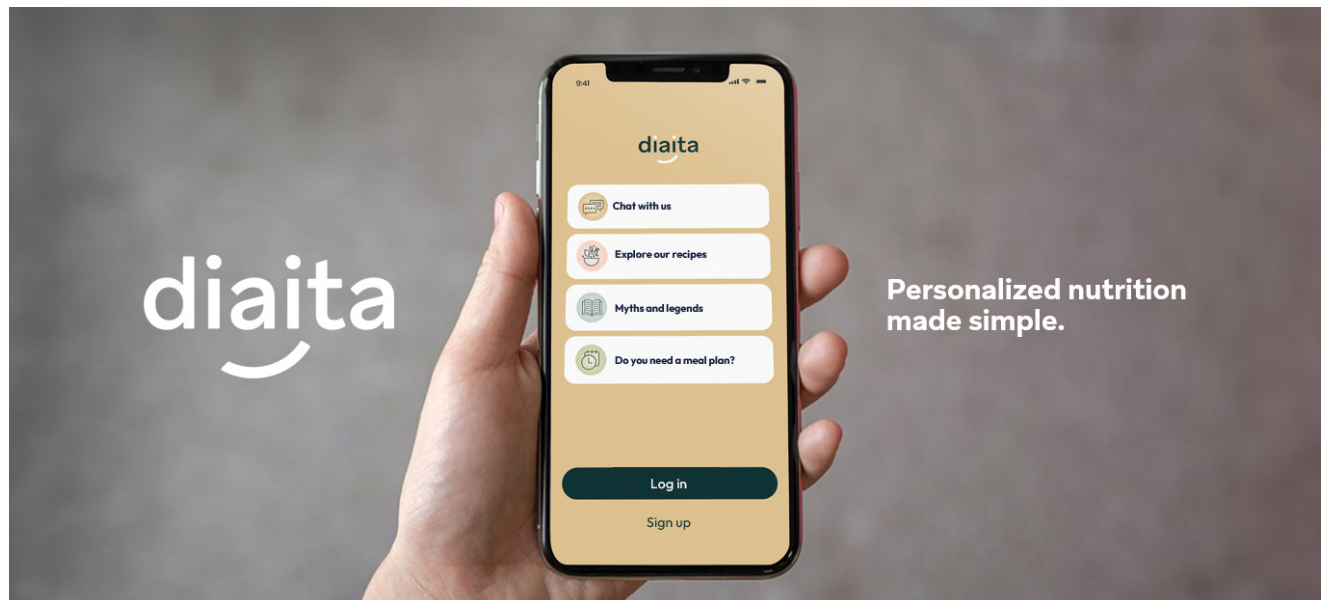
DIAITA follows data sovereignty and the privacy-by-design principle. Integrated with the DataU platform, it captures explicit, revocable user consent and allows users to manage data preferences at any time. The system collects only essential data, avoids implicit tracking, and enables users to modify or delete feedback used for personalization. All data is anonymized, encrypted, and handled in full GDPR compliance to minimize risk. When third-party services or APIs (e.g., LLM APIs) are used, they are integrated through the system API under strict compliance, ensuring no sensitive user data is retained outside the application.

## Main value of the programme

FOODITY provided a foundation for personalized, trustworthy, and explainable AI in food and nutrition, enabling DIAITA to access novel resources—specifically the NAct ontology and DataU platform—and to foster a collaborative ecosystem of innovators, experts, and patients. The program emphasized responsible data use and interoperability, which was essential for ensuring DIAITA's GDPR compliance and scientific rigor. FOODITY also offered mentorship, user validation, and visibility, accelerating DIAITA's development and impact. Most importantly, FOODITY demonstrated how digital innovation can meaningfully empower people and support better healthcare outcomes.

## Testimonial

Participation in the FOODITY project has been rewarding on many levels. It provided our team with not only the technical resources to develop our idea, but also professional mentorship and user feedback to guide a user-centered solution. Engaging patients, caregivers, and healthcare professionals kept us grounded in real-world needs. Overall, we felt supported, challenged, and inspired. FOODITY pushed us to take data, design, and ethics seriously, and we're grateful to be part of such a forward-thinking initiative in food, technology, and health.



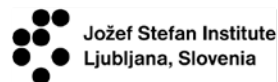
# FoodMarketMap

Mastering and recognizing key elements of food choices to monitor and personalise your diet



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**ZERO** – SME

**JSI** – Public research institute

**FCSE** - University

### Main project contacts

**Miha Majetič, Žiga Patačko Koderman**  
(ZERO)

**Barbara Koroušič Seljak, Tome Eftimov** (JSI)

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### Links & Contacts



[zerodays.dev/en](https://zerodays.dev/en)



[cs.ijs.si](https://cs.ijs.si)



[finki.ukim.mk/en](https://finki.ukim.mk/en)



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## The project

FoodMarketMap, part of the FOODITY initiative, enhances shopping experiences by promoting personalised nutrition and sustainable food systems. Integrated into the Eatvisor mobile app, it respects data privacy while guiding users toward healthier, cost-effective, and sustainable food choices. Users photograph receipts, and the system identifies most products via a food composition database. Unrecognized items can be scanned, enabling image-based recognition. Eatvisor then suggests better alternatives. The module combines FOODITY tools with AI components like natural language processing, food logo analysis, and recommendation systems. Data follows FAIR principles using the NAct component. Outputs include the Eatvisor app, open datasets, and three novel AI components.

## The challenge

FoodMarketMap addresses the challenge of empowering citizens to make healthier, sustainable, and cost-effective food choices while ensuring data sovereignty and ethical data use. Focusing on the strategic FOODITY area of enhancing shopping experiences, it integrates AI-driven tools - including OCR, NLP, and image recognition - into the Eatvisor app to identify food items from receipts and images, map them to a food composition database (FCDB), and provide smart recommendations. The project integrates FOODITY components and develops supplementary AI components, introduces FAIR-compliant data practices, and promotes citizen engagement, trust, and behavioural change through personalised, data-driven digital nutrition solutions.



## Key results

FoodMarketMap developed an advanced module within the Eatvisor mobile app, enabling users to track food purchases by photographing shopping receipts and food items. The solution uses OCR, NLP, and image recognition to identify products, match them with a food composition database, and assess nutritional quality and sustainability. It provides personalised recommendations for healthier, more sustainable, and cost-effective alternatives. The project delivered three novel AI components, three open-source annotated datasets, and a GDPR-compliant data management framework aligned with FAIR principles. This empowers citizens to make informed food choices while retaining control over their personal data.

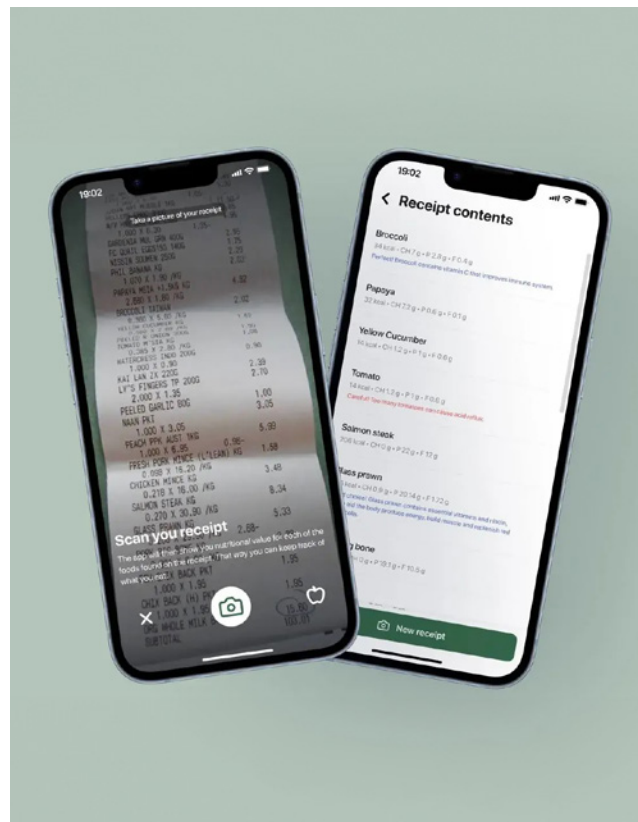
## The value

FoodMarketMap stands out by combining AI-driven food recognition, receipt analysis, and personalised dietary guidance within a single mobile app - Eatvisor. Unlike other tools, it integrates cutting-edge OCR, NLP, and image recognition to identify both branded and generic food products from real-world shopping data. It aligns with FAIR and GDPR principles, ensuring data privacy and citizen control. The solution is uniquely compatible with the Slovenian FCDB and adheres to European standards, making it easily adaptable across EU countries. Its user-centered approach empowers citizens to make informed, healthier, and more sustainable food choices based on their actual consumption patterns.

## Increased data sovereignty

FoodMarketMap promotes personal data

sovereignty by giving users full control over how their food-related data is collected, accessed, and shared. Integrated within the Eatvisor app, the solution ensures transparency and consent at every stage, aligning with GDPR and FOODITY's ethical data principles. Users can view, manage, or delete their data and opt out at any time. Data is processed securely via the FOODITY dataU and datalake platforms, with additional protection through Linked Data Authorization. By making rights actionable (such as access, portability, and objection) FoodMarketMap empowers citizens to use digital nutrition tools without compromising their privacy or autonomy.



## Main value of the programme

The FOODITY project provides a foundational framework for developing ethical, citizen-centric, and data-driven solutions in the food and nutrition domains. Its main value lies in promoting personal data sovereignty, enabling individuals to control and benefit from their own data. By offering interoperable components, secure data infrastructure (dataU and datalake), and FAIR-compliant tools, FOODITY empowers developers and researchers to build trusted applications. It fosters innovation across key areas like personalised nutrition, sustainable food systems, and digital shopping experiences, while ensuring compliance with GDPR and ethical standards. FOODITY bridges technology, data governance, and citizen empowerment for a healthier, more sustainable future.

## Testimonial

Participating in the project was a rewarding experience for our consortium, offering a unique opportunity to collaborate across AI, food science, and behavioural science. The interdisciplinary nature of the programme allowed us to explore innovative solutions to real-world challenges in nutrition and sustainability. While the project was ambitious, we believe that its outcomes will make a meaningful contribution to the field. In particular, we see great potential for developing digital tools that support healthier, more sustainable food choices with minimal effort required from consumers. Overall, it was an inspiring journey that expanded the boundaries of what is currently achievable.



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**bSpoke Solutions** – SME – Innovative ICT solutions provider

**Poios Einai To Afentiko** – Consumer-collective initiative

### Main project contacts

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## The project

The EcoTrace mobile application empowers individuals to make healthier and more sustainable dietary decisions by combining personalized nutrition guidance with carbon-footprint and sustainability metrics. Built on the EcoSustain platform and enhanced with FOODITY Components, Through EcoTrace users received customized food recommendations, explored environmental impacts of products, and were able to track the full supply-chain. A pilot study with farmers and consumers validated EcoTrace potential and demonstrated positive behavioural and data-sovereignty outcomes.

## The challenge

EcoTrace tackled three core challenges in contemporary food systems: lack of accessible, reliable data on environmental impacts; minimal individual control over nutrition data collection, sharing, and use; and limited end-to-end supply-chain transparency. To overcome these barriers, it integrated real-time sustainability scoring and quantitative carbon-footprint analytics with an immutable event-sourcing ledger recording every supply-chain event, EcoTrace empowered users with actionable insights and capabilities to own their dietary data and drive more responsible, sustainable food choices.

## Key results

EcoTrace's pilot implementation delivered a comprehensive solution that included personalized nutrition recommendations tailored to individual user profiles, real-time sustainability analytics including detailed carbon-footprint calculations

and composite sustainability scoring, and immutable event-sourcing traceability that logged every supply-chain transaction in a tamper-evident ledger. Conducted with over 200 farmers and consumers, the pilot implementation demonstrated measurable shifts in user behaviour toward healthier and more sustainable dietary choices.

## The value

EcoTrace distinguished itself by uniquely combining granular event-sourcing traceability with modular integration into the EcoSustain platform. EcoTrace offers a replayable, tamper-evident audit trail surpassing traditional blockchain approaches. The application delivered holistic consumer insights by uniting personalized nutrition guidance with real-time sustainability metrics and carbon-footprint analytics in a single interface, all underpinned by robust GDPR-aligned data sovereignty controls for consent, minimization, and user-initiated deletion.

## Increased data sovereignty

EcoTrace advanced personal data sovereignty through its integration with the DataU secure-sharing platform, which enforced transparent consent workflows with clear context for every data request and action. It implemented strict data-minimization principles, collecting only essential attributes necessary for personalized recommendations and sustainability analysis. Users were granted full control over their information, including the ability to view, export, or permanently delete any data records. The platform also embedded educational modules explaining privacy rights, data provenance, and

best practices, thereby fostering greater user awareness, confidence, and empowerment over personal nutrition and sustainability data.

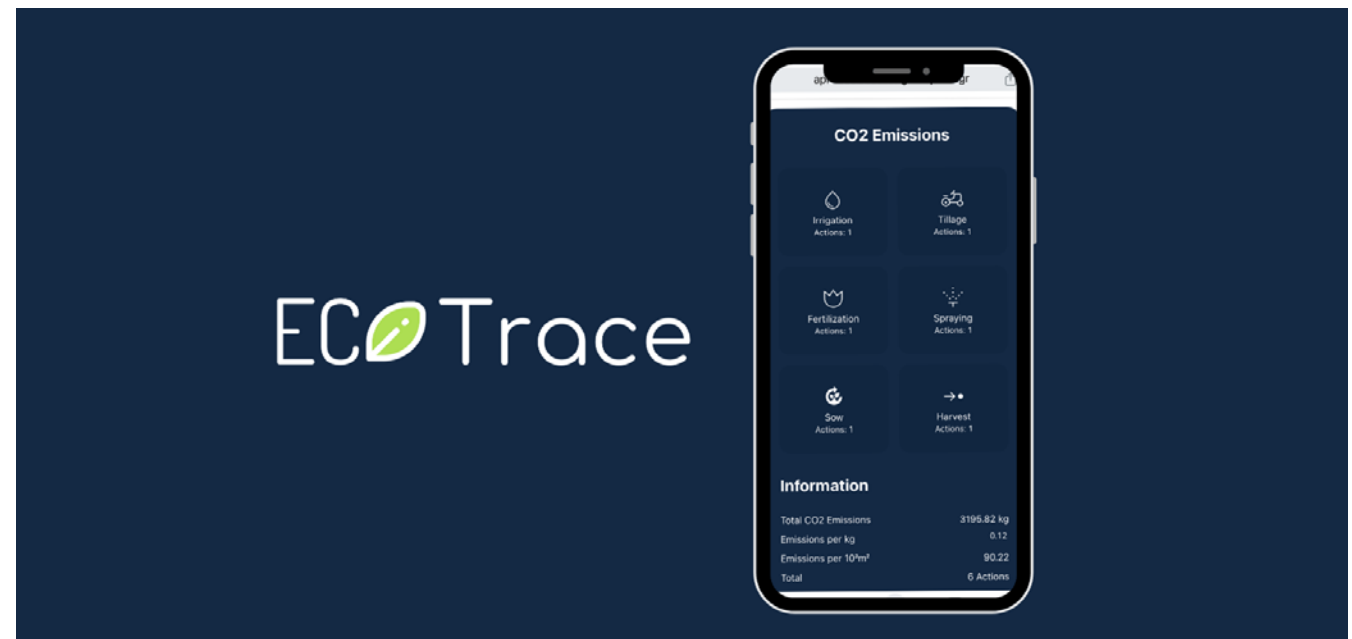
## Main value of the programme

EcoTrace's main contribution to the FOODITY project and programme lay in its role as a flagship pilot demonstrating the practical integration of open data systems, privacy-by-design, and sustainability analytics in a single consumer-focused application. It democratized access to nutrition and environmental metrics by publishing standardized datasets through open APIs, empowered citizens with GDPR-aligned privacy controls exemplifying data-sovereignty best practices, and delivered actionable sustainability insights via embedded carbon-footprint and traceability analytics. By aligning with EU FOOD 2030 objectives—spanning innovation, nutrition

security, and data rights—EcoTrace provided a scalable blueprint for future digital solutions within the programme.

## Testimonial

Participating in the FOODITY programme has been a truly rewarding experience. It allowed us to bring EcoTrace to life in collaboration with experts from across Europe who share a vision for healthier, more transparent food systems. We appreciated the support, openness, and energy of the community—and the opportunity to showcase how responsible data use can empower citizens. Beyond funding, FOODITY gave us a platform to test bold ideas and connect with forward-thinking stakeholders. We leave the programme inspired, with stronger tools and partnerships to continue driving change.



# Kitchen Adventure

Your gamified journey to healthier, sustainable home cooking. Personalized recipes, AI guidance, and family fun await!



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**Climate Smart Elephant** – For Profit  
**Stichting International Parents Alliance** – Non-Profit

### Main project contacts

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### Additional contributors

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## The project

Kitchen Adventure is a gamified mobile app designed to make healthy and sustainable cooking fun and accessible for families. Developed by Climate Smart Elephant and the International Parents Alliance, the app transforms meal prep into an interactive experience through AI assistance, personalized nutrition plans, eco-score-based gamification, and family-friendly challenges. It addresses the decline in home cooking and promotes healthy and plant-forward eating habits. The app empowers users to improve their dietary choices, reduce food waste, while enjoying cooking as quality family time.

## The challenge

Many families view cooking as a chore, leading to increased reliance on ultra-processed foods and decreased nutritional quality. Kitchen Adventure addresses several interconnected challenges: the decline of home cooking, poor dietary habits, and lack of engagement in sustainable food practices. The project also tackles decision fatigue around meal planning, limited knowledge of healthy and plant-based cooking, and low awareness of food-related environmental impacts. By reframing cooking as entertainment and integrating AI, gamification, and eco-scoring, the app encourages healthier, more sustainable habits.

## Key results

Kitchen Adventure is a mobile app that gamifies healthy, sustainable cooking. Key features include a personalized nutrition plan, eco-score-based recipe recommendations, an AI assistant (Chef Mandula the hedgehog), barcode-based food



tracking, and age-appropriate cooking steps for families. The app supports multi-language use and includes interactive challenges, live cooking events, and a grocery list tool. Together, these features empower users to cook more often, eat healthier, and make eco-friendly food choices.

## The value

Kitchen Adventure stands out by combining behavioural science, gamification, and AI to make sustainable cooking a fun, family-oriented experience. Unlike traditional recipe or diet apps, it reframes cooking as entertainment through challenges, rewards, and an engaging AI chef assistant designed for children. The app supports personalized nutrition plans, tracks eco-scores, and offers live events for community building—features rarely found together in one platform. With professionally developed recipes, multi-language support, and educational content, Kitchen Adventure uniquely merges health, sustainability, and user empowerment into one playful, impactful solution.

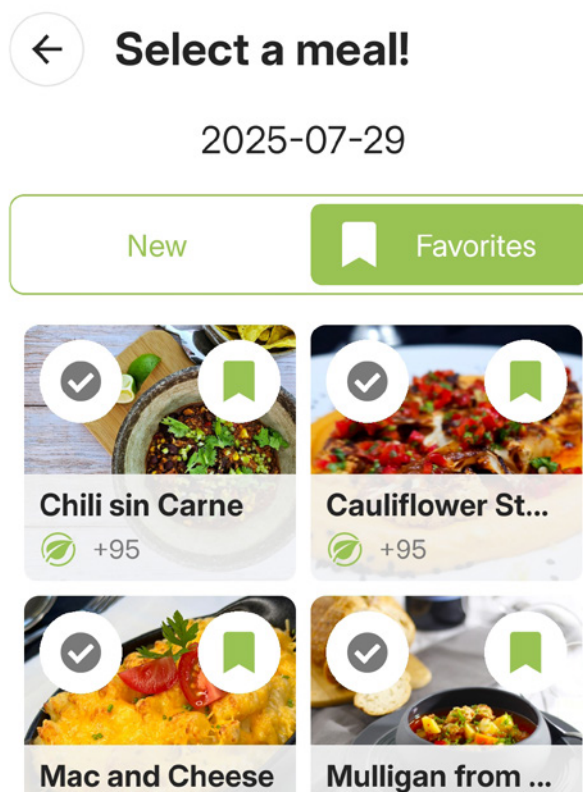
## Increased data sovereignty

Kitchen Adventure has advanced personal data sovereignty by ensuring users have full control over their personal data. From onboarding, users are informed about how their data is used and can manage consent settings transparently. All data is stored securely in GDPR-compliant systems, with options for users to retrieve or delete their data at any time. The app avoids collecting unnecessary information, prioritizing user privacy while still enabling personalized experiences. Through educational workshops and in-app messaging, the

project also raises awareness about data rights, helping users understand and exercise control over their digital footprint in food systems.

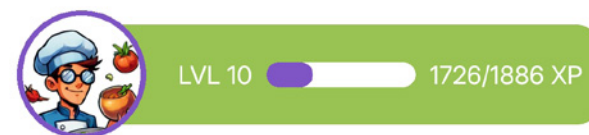
## Main value of the programme

The FOODITY programme provided essential support that transformed Kitchen Adventure from concept to a market-ready solution. Mentorship and structured feedback helped refine the business model, validate technical integrations, and align with EU data sovereignty goals. Crucially, FOODITY funding allowed us to create our application which otherwise would only be a concept. The financing structure allowed us to test and developed advanced features and content.

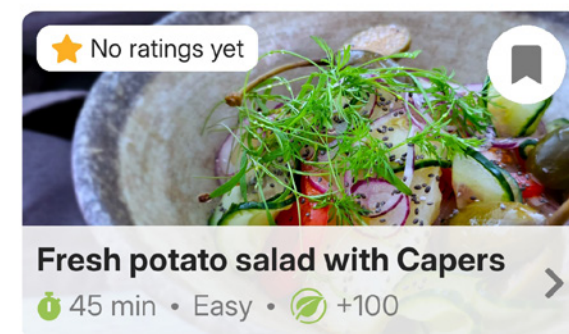


## Testimonial

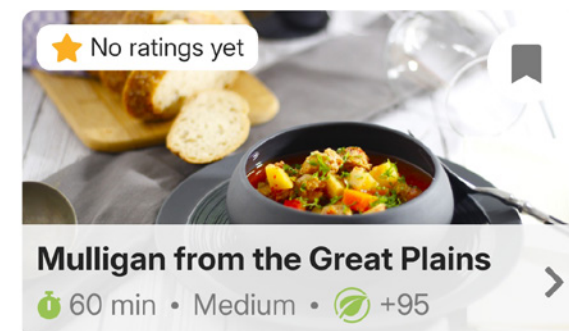
Participating in the FOODITY programme has been an incredible journey for our team and a huge opportunity to grow. The support, mentorship, and structured approach really helped us stay focused and push the Kitchen Adventure app to the next level. The generous, predictable funding structure made a huge difference in development and delivery.



2025-07-31



2025-08-01





# STRADA

Development of a miniaturised food sensor enhanced with data-driven technology for efficient food management

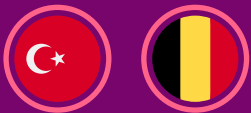


## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

STRADA Microsystems – SME  
EV ILVO – SME

### Main project contacts

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## The project

This project delivers a miniaturised, low-cost food sensor that pairs chemo-/biosensors with smartphone and analytics to check freshness, safety and nutrient quality in under a minute. Volatile-gas probes on a sensor chip detect spoilage markers, while on-device chip send data wireless to smartphone also corrects for temperature and food type, issuing 'safe', 'eat soon' or 'discard' guidance via a companion app.

## The challenge

Selective polymer layer – Synthesise and pattern a robust, humidity-tolerant polymer that responds only to volatile biogenic amines yet survives cleaning, heat and food acids.

NFC-powered micro-device – Engineer an ultra-low-power NFC front-end and antenna that can energise the sensor through dense packaging or liquids while meeting food-grade sealing rules. Reliable, calibration-free readings – Mitigate drift from temperature swings, ageing and matrix effects with on-chip references and self-diagnostics.

Tight system integration – Co-package sensing, analog front-end, MCU and wireless within a coin-sized module that is manufacturable, low-cost.

## Key results

During the project course we developed and optimized the sensor specifically for meat, chicken, fish and basic vegetables. Once optimized we focused on reusability of the sensor and develop a peelable polymer.

At the same time we developed our mobile app and dashboard for monitoring from screen which is suitable for grocery stores.

## The value

Our miniaturised sensor delivers real-time, lab-grade, quantitative spoilage and nutrient data in seconds, powered only by passive NFC, and continuously improves through cloud-retrained AI. Unlike one-shot colorimetric strips, which rely on subjective visual interpretation, suffer from lighting bias and cannot correct for temperature or food matrix effects, our device integrates volatile-amine, pH and dielectric probes on a single reusable chip, self-calibrates, and streams results straight into inventory, quality-control dashboards and consumer apps. The fusion of multi-modal chemistry, edge analytics, seamless connectivity and reusability delivers a uniquely actionable, globally scalable, trusted platform end-to-end food-management solution across retail, catering and home settings.



## Increased data sovereignty

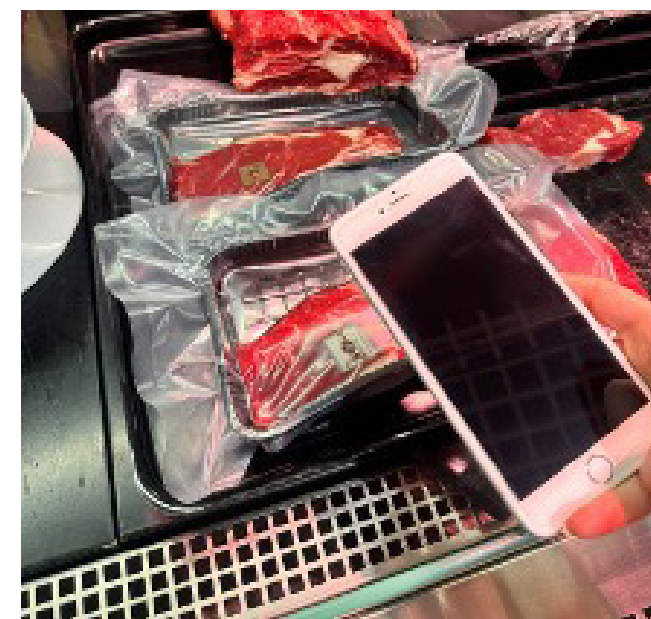
We anchor personal data sovereignty by building on Foodity's open-source Data-U wallet and Data-Lake backbone. The sensor streams only pseudonymised hashes over NFC; raw chemistry traces stay on the user's device unless explicitly exported. Semantic labels and FAIR-compliant schemas inside Data-Lake guarantee portability to other Foodity-compatible services, while differential-privacy analytics let communities benchmark waste or nutrition without exposing individuals. Thus, insight grows, ownership remains personal and deletion rights are one swipe away.

## Main value of the programme

The program contributed us in different ways. First we were able to develop first prototypes of our device. Then we could develop an app and dashboard and initiated field tests. Over the course of the project we attended critical lectures from experience people. The lectures provided a clean route for us.

## Testimonial

Joining the programme really provided a clear route to us. Weekly sprints with sensor, data-privacy and ag-food mentors turned ideas into field-tested prototypes, while peer sessions kept motivation high. Funding was great, but the bigger win was instant feedback from retailers and regulators lined up by the organisers. We're leaving with sharper tech, a clearer roadmap and a network.



# MI4SaferFOOD

From farm to phone—empowering consumers with real-time freshness insights for smarter shopping, safer food, and a healthier planet



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

Smart Agro Hub – SME  
Agricultural University of Athens – University  
EKPIZO – Non-profit

### Main project contacts

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## The project

Over recent decades, consumer expectations for food quality and freshness have increased. To meet growing domestic and export market demands, automation in food quality assessment is essential for consistent quality, reduced costs, and improved supply chain efficiency. A mini-consortium—Smart Agro Hub, the Agricultural University of Athens, and EKPIZO—is developing a sustainable food system solution. The core innovation is a smartphone app that uses multispectral imaging to assess real time food freshness, empowering consumers to make informed choices during their shopping experience.

## The challenge

1. Find more potential users for our application, collecting more data
2. Enrich our application with new data entries from a variety of fruits and vegetables
3. Optimize our application using the different feedback
4. Train the citizens how to shop fresh fruit and vegetables using our methodology
5. Scale up from a model/pilot to business

## Key results

We have created a mobile application for an easy to use, real-time evaluation of the quality (freshness, product predicted life) of apples and lettuces by consumers when visiting shopping markets. More specifically, freshness has been recognized using multispectral images from digital cameras. The proposed technology and mobile app can have significant impact on health of consumers and further economic and environmental consequences.



## The value

While food quality assessment technologies like multispectral imaging are widely used in industrial settings, this project introduced an innovative shift by targeting end consumers. The focus was to empower individuals—not just professionals—with real-time, science-based tools for evaluating food freshness and safety. Using multispectral imaging, an extensive dataset of RGB spectral data from various apples and lettuces was developed and linked to the publicly accessible DATAU platform. This consumer-oriented approach, led by a Greek consortium, aimed to democratize food quality information, enhancing transparency, safety, and trust throughout the food supply chain via a public access mobile application.

## Increased data sovereignty

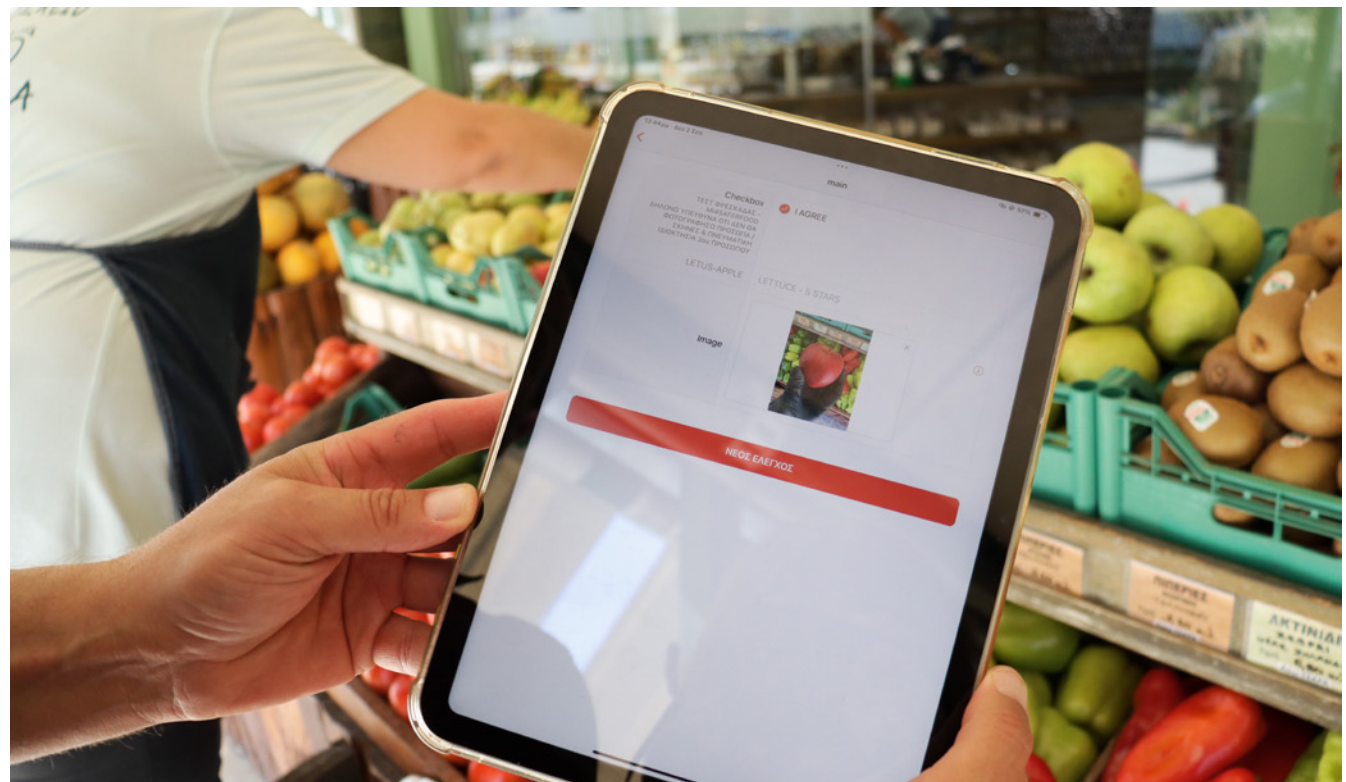
We have contributed to personal data sovereignty by designing our food quality assessment technology with consumer ownership and control at its core. Our smartphone application processed multispectral image data locally on the user's device, ensuring that personal food choices and usage patterns remained private unless explicitly shared. Furthermore, users contributed with anonymized data to the DATAU big platform, supporting collective research while maintaining individual consent and control. By combining open-access datasets with user-driven tools, we empowered individuals to make informed food decisions without compromising their personal data autonomy.

## Main value of the programme

The FOODITY project empowered consumers by bringing advanced food quality and freshness assessment tools directly to their smartphones. By leveraging multispectral imaging and a comprehensive RGB spectral dataset, FOODITY enabled real-time, personalized evaluation of fruits and vegetables. Additionally, FOODITY project supported sustainable consumption by helping users make informed choices, reducing food waste, and promoting healthier diets. The project's innovative integration of technology, data, and user-driven design marked a significant step toward smarter, more sustainable food systems.

## Testimonial

Participating in the FOODITY programme has been an exciting and rewarding experience. It's inspiring to work alongside passionate experts and innovators who care about making food safer and fresher for consumers. Seeing cutting-edge technology to be implemented into a user-friendly app that people can actually use in their daily lives feels truly impactful. It was great to be part of a project that puts people's health and sustainability first. Overall, it's been a meaningful journey full of learning and positive change.



# 3FAIR

Empowering fair trade shops through data ethics, digital tools, and citizen feedback for a sustainable food system



## PROJECT ID

### Beneficiaries



### Main project contacts

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**Eleni Stamataki** (CIHEAM-MAICH)

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[commonslab.gr](https://commonslab.gr)



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### Countries



### Type of organisation

**CommonsLab** – Social Cooperative Enterprise

**Terra Verde** – Social Cooperative Enterprise

**CIHEAM - MAICH** – Research Institute

## The project

3FAIR empowers fair-trade and solidarity shops with digital tools to connect more effectively with consumers and producers. Using QR codes, consumers can access product and producer information, provide anonymous feedback, and share personal data with informed consent. The platform integrates open-source technologies like LimeSurvey and privacy-first solutions like DataU to enhance transparency, trust, and engagement. It supports ethical data practices, boosts small shop visibility, and promotes sustainability in food systems. Piloted at Terra Verde in Crete, the system fosters ethical consumerism and strengthens local food networks through data-driven interactions.

## The challenge

The project addresses the lack of digital infrastructure and data capabilities in small fair-trade stores, which limits their ability to connect with consumers and manage inventory based on real feedback. It also tackles the need for data sovereignty and ethical data use in food systems. By developing a privacy-first digital platform, 3FAIR enables communication, trust, and engagement between stores, consumers, and producers, empowering all actors to participate in more informed, sustainable consumption and production practices.

## Key results

3FAIR delivered a functional, pilot-tested digital solution combining QR code product tags, multilingual product pages, anonymous consumer surveys, and GDPR-compliant personal data



consent via DataU. Users can access information, provide feedback, and manage their data rights. The platform is mobile-friendly, multilingual, and built with open-source technologies. It has been deployed in Terra Verde shops, gathering real-time feedback and consumer behavior data to inform product strategy. This demonstrates increased digital capability for small stores and active consumer participation in fair trade.

## The value

Unlike generic digital marketing or survey tools, 3FAIR is designed specifically for solidarity and fair-trade shops. It integrates ethical data handling, consumer empowerment, and transparency within one coherent, open-source framework. The solution builds trust between conscious consumers and small-scale producers and supports participatory design, community feedback, and socially responsible retail practices, making it distinct in the agri-food innovation landscape.

## Increased data sovereignty

3FAIR ensures personal data sovereignty by integrating the DataU framework, which provides users control over what data they share, with whom, and when. Feedback is collected anonymously and separate from the personal data, ensuring GDPR compliance. The consent process is transparent and revocable at any time. Data is stored securely in decentralized systems managed by the user. Through workshops and focus groups, users are also educated on their data rights, helping promote awareness and active engagement in ethical data practices related to food choices and communication.

## Main value of the programme

FOODITY enabled the 3FAIR project to move from concept to real-world deployment. With support for development, co-design, and testing, the programme facilitated the creation of a robust solution tailored to the needs of solidarity shops and ethically minded consumers. It also provided a collaborative environment to refine business models, improve citizen engagement strategies, and integrate with other FOODITY components. The mentorship and peer exchanges within the programme contributed to capacity building and a stronger foundation for scale-up and impact.

## Testimonial

FOODITY was a truly inspiring experience. It gave us space to experiment, co-create with citizens and peers, and validate a meaningful solution. We appreciated the flexibility, the mentoring, and the community of practice that surrounded us. It helped us think critically about our user journeys, communication strategies, and social impact. We leave this phase motivated and better prepared to expand 3FAIR beyond the pilot site and to continue shaping a more ethical and participatory food system.



# MyNutri

Empowering healthier, sustainable food choices through personalised AI-driven insights

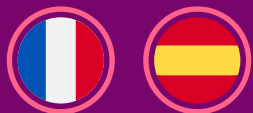


## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**Tellspec** – Private company

**CNTA** – Food research centre

### Main project contacts

**Isabel Hoffmann** – Tellspec

**Irene González** – CNTA

### Additional contributors

**Rafael Queiroz, Luis Miguel Pires, Johny Miro, Mark Bloore** – Tellspec  
**Rodrigo Fernández, Elena Romero** – CNTA

### Links & contacts



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## The project

MyNutri is an Android application that empowers individuals to make informed food choices tailored to their personal health profiles and sustainability values. By scanning or entering a product's barcode, users receive two scores: a personalised health score and a carbon footprint score. The health score is generated using AI models that consider individual health data, including allergies and metabolic concerns, while the sustainability score reflects the product's environmental impact. MyNutri integrates secure data management via DataU and leverages open-source databases like Open Food Facts, offering a user-centric, privacy-respecting solution for healthier and more sustainable shopping experiences.

## The challenge

MyNutri addresses the challenge of making personalised nutrition accessible and actionable during everyday shopping. It tackles the lack of reliable, individualised health scoring systems that consider personal health conditions, such as diabetes or allergies. Additionally, it confronts the absence of integrated sustainability data in food labelling. The project also navigates the complexities of GDPR compliance and data sovereignty, ensuring users retain control over their personal health data. By combining AI, secure data infrastructure, and user-centred design, MyNutri bridges the gap between health, sustainability, and digital trust in the food and nutrition domain.

## Key results

MyNutri has delivered a functional Android app that provides personalised health and



sustainability scores for food products. It integrates AI-driven health scoring based on individual profiles and uses Open Food Facts for product data. The app also includes carbon footprint scoring and access to Tellspecopedia for information on food ingredients and their impact in health. DataU ensures GDPR-compliant data handling and user consent. The solution was co-developed and tested with over 150 Spanish consumers (100 consumers during the first phase and 40 participants -30 in focus groups and 10 in interviews- in the second phase), ensuring the app reflects real user needs and expectations.

## The value

MyNutri stands out by offering a personalised health score that adapts to each user's specific health profile, including allergies and metabolic conditions. Unlike other apps, it integrates real-time product data with a proprietary database on food ingredients and their health impact (Tellspecopedia), sustainability scores, and a AI-based health scoring engine. It also includes a full GDPR-compliant data sovereignty through DataU. The app was co-developed and tested with over 150 consumers, ensuring it reflects real user needs. This combination of personalisation, transparency, and ethical data handling makes MyNutri a distinctive and trustworthy tool in the food and nutrition space.

## Increased data sovereignty

MyNutri places data sovereignty at its core by integrating the DataU platform, which ensures decentralised, GDPR-compliant data management. Users explicitly consent to data sharing, can view

and revoke permissions at any time, and retain full control over their personal health information. All sensitive data is encrypted, anonymised, and stored securely. The app's architecture supports transparency and accountability through audit logs and role-based access controls. By empowering users to manage their data independently and securely, MyNutri fosters trust and sets a new standard for ethical data use in personalised nutrition and digital health services.

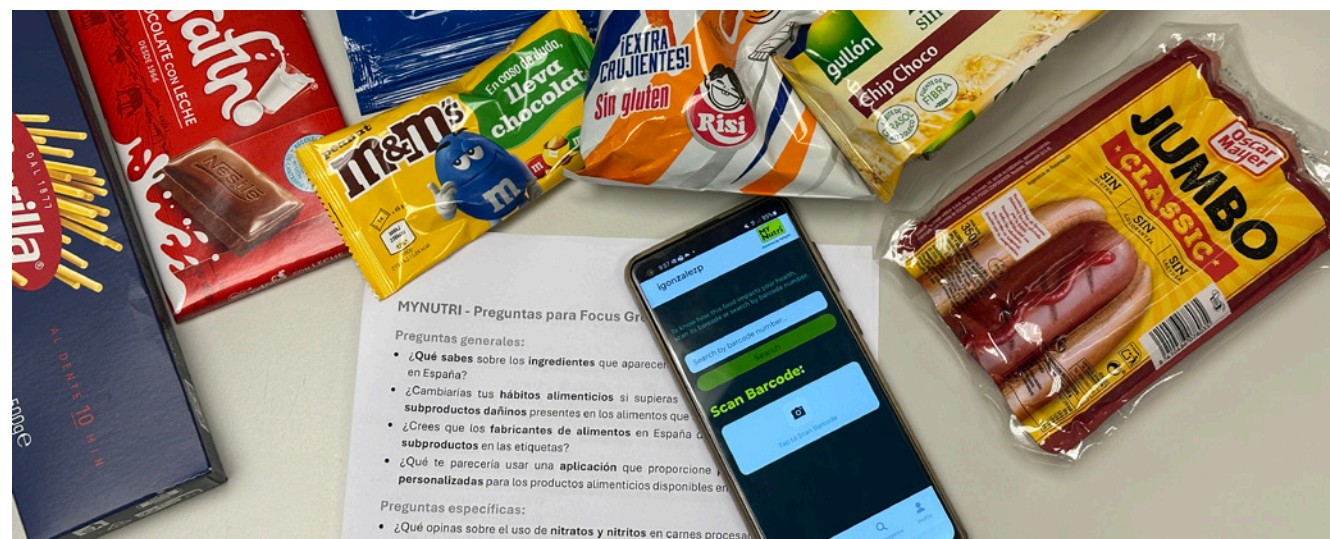
## Main value of the programme

FOODITY has provided a structured framework that supported the development of MyNutri across technical, ethical, and user engagement dimensions. The availability of tools like DataU and access to expert feedback helped ensure compliance with GDPR and alignment with best practices. Rather than focusing solely on funding, FOODITY's value lies in its comprehensive support throughout the solution's lifecycle.



## Testimonial

FOODITY offered a well-structured mentoring programme that guided us through every stage of development—from technical design and data integration to user engagement and validation. Its comprehensive support helped us shape a solution that is both robust and aligned with user needs.



# ONCONOURISH

No person with cancer without nutritional treatment



## PROJECT ID

### Beneficiaries



### Main project contacts

**Kiko Borja Escribá** – IBIONS

### Additional contributors

**Jorge Alpuente, Ángel Gonzalez** – Datipic

**Javier Alcazar, Ángel Borque, Julio Madrigal** – The Movemen

**Sara Bañón** – IBIONS

### Countries



### Type of organisation

**IBIONS** – Startup

**Datipic** – Startup

**TheMovemen** – NGO

### Links & contacts



[ibions.com](https://ibions.com)



[themovemen.org](https://themovemen.org)



[datipic.com](https://datipic.com)



[info@ibions.com](mailto:info@ibions.com)

## The project

ONCONOURISH is an AI-powered dietary optimization platform specifically designed for cancer patients to improve nutritional adherence and treatment outcomes. The solution addresses the critical gap in nutritional counseling by providing personalized, evidence-based dietary guidance that helps patients overcome lifelong eating habits—the main barrier to dietary change. Through an intuitive mobile and web application, patients can automatically log meals via photos, text, or audio, receive AI-generated nutritional analysis, and access personalized meal plans. The platform integrates with DataU for GDPR-compliant data management and features a comprehensive back-office system for healthcare professionals. By combining cutting-edge AI technology with medical and nutritional expertise, ONCONOURISH empowers cancer patients to achieve sustainable nutritional adherence and improved quality of life.

## The challenge

Our project addresses the critical challenge that over 30% of cancer patients lack access to nutritional counseling despite proven benefits for quality of life (>28%) and mortality reduction (>40%). The main barrier identified is the difficulty in adhering to nutritional protocols due to lifelong eating habits. Cancer patients struggle with complex dietary changes while managing treatment side effects and emotional stress. Additionally, healthcare systems often fail to provide routine nutritional support integration. ONCONOURISH tackles these challenges by simplifying dietary logging, providing personalized AI-driven feedback, and creating an engaging,

user-friendly platform that supports sustainable behavioral change in cancer patients' nutritional habits.

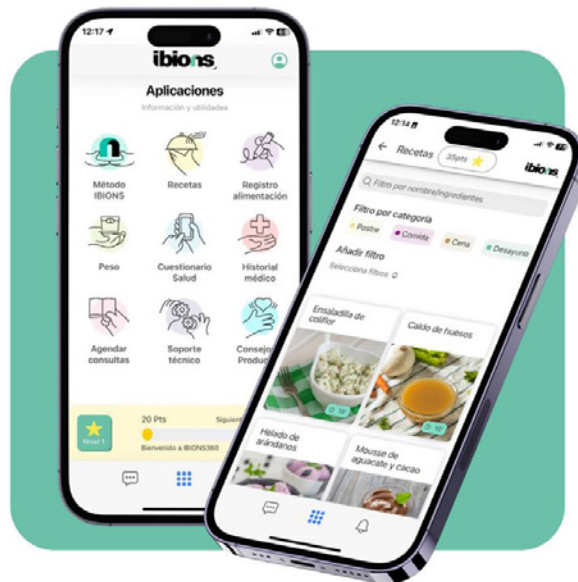
## Key results

We have developed a comprehensive AI-powered dietary optimization platform featuring: (1) Automatic multimodal food logging system accepting photos, text, and audio inputs with intelligent meal analysis; (2) AI-driven nutritional analysis and personalized meal planning; (3) Advanced product scanner and menu planner; (4) Gamified engagement system with rewards and progress tracking; (5) GDPR-compliant data management through DataU integration; (6) Healthcare professional back-office management system; (7) Educational resources and interactive content tailored for cancer patients. All recommendations are based on the latest scientific evidence and supervised by our medical-nutrition team.

## The value

ONCONOURISH's unique value lies in our multidisciplinary team comprising medical doctors, nutritionists, researchers, and developers with years of experience, all focused on patient-centered care based on the latest scientific evidence. Unlike generic nutrition apps, our solution is specifically designed for oncology patients' unique needs, integrating evidence-based nutritional protocols validated by our medical team. Our patient-focused approach addresses the psychological challenges of dietary change during cancer treatment through gamification and personalized support, creating a holistic

ecosystem that combines cutting-edge technology with proven medical expertise and compassionate care.



## Increased data sovereignty

ONCONOURISH prioritizes personal data sovereignty through comprehensive GDPR compliance via DataU integration, ensuring patients maintain complete control over their health information. Our platform implements transparent consent management, allowing patients to access, modify, or withdraw their data at any time. We provide clear, jargon-free explanations of data rights through initial introductions and periodic refreshers, empowering patients with knowledge applicable beyond our platform. The system maintains detailed audit trails of all data interactions while enabling easy request processing for data access or deletion. By making data protection straightforward and stress-free, we empower cancer patients to make

informed decisions about their personal health data usage.

## Main value of the programme

The FOODITY programme has been instrumental in providing cutting-edge AI components that form the technological backbone of ONCONOURISH. FOODITY's contributions include: (1) Advanced food image recognition technology enabling seamless meal logging through photos; (2) Personalized nutrition planning algorithms that generate tailored dietary recommendations; (3) Extensive food nutrition information database providing detailed nutrient analysis; (4) DataU solution ensuring GDPR-compliant data management and privacy protection. These integrated components have enabled us to create a sophisticated, medically-validated platform that would have been impossible to develop independently. FOODITY's technical expertise and regulatory compliance tools have accelerated our development timeline while ensuring the highest standards of data protection and AI accuracy.

## Testimonial

Working closely with all three consortium members, and especially with the dedicated FOODITY team, has been a profoundly inspiring experience. They provided us with the essential tools to maximize our collaboration, transforming our proposal into a truly patient-centric and secure application. This experience has redefined our way of working, setting the foundation for future successful collaborations. We are excited about the impact ONCONOURISH will have thanks to this joint effort.



# REDUCE

Leftovers reduction during consumption phase combining technology and user engagement in collective catering context



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**Behavix** – Startup  
**Spritz Matter** – Startup  
**TESAF (UNIPD)** – University department

### Main project contacts

**Massimiliano Carraro**  
**Luca Pajola**  
**Lorenzo Guerrini**

### Additional contributors

**Stefania Malfatti, Francesco Marinello, Alberto Carraro, Alberto Castagnaro, Roberta Conte**

### Links & contacts



[behavix.it](http://behavix.it)  
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## The project

Reduce aims to prevent plate waste by combining data-driven technology and user engagement in the hospital canteen of Vicenza (IT). We collect data on leftovers, environmental factors, and users' habits to train an AI system that predicts waste and suggests targeted interventions. The project involves: a Computer Vision tool to quantify leftovers; a feedback system to engage users and understand waste drivers; and AI algorithms to forecast waste patterns. The goal: tackle food waste and foster sustainable habits through smart, scalable solutions. Our catering partner is provided with a dedicated data visualization tool to handle food waste management.

## The challenge

The REDUCE project tackles the critical issue of plate waste in collective catering, a problem that often goes unmeasured and unaddressed. In particular, the project focuses on leftovers in public canteens, where large-scale operations struggle to identify waste patterns and root causes. It addresses two core challenges: lack of granular, real-time data on food waste and poor user involvement in waste reduction strategies.

## Key results

We developed a modular system that quantifies plate waste, collects user feedback, and predicts food waste patterns. The solution includes a Computer Vision device to automatically detect and classify leftovers, a mobile-based feedback interface to capture meal satisfaction and appetite, and a predictive AI model to correlate waste with behavioural and environmental factors.

All modules are connected to a web-based dashboard accessible to catering managers. The system enables both real-time monitoring and long-term trend analysis, paving the way for informed interventions, better menu planning, and stronger engagement with end-users in reducing food waste.



## The value

Unlike existing food waste solutions that focus on kitchen operations or procurement, REDUCE addresses waste at the consumption level—directly involving users. It combines Computer Vision for passive data collection, behavioural feedback tools, and predictive AI to create a full-cycle waste management and prevention system. The integration of real-time environmental variables makes the model highly adaptable.

Moreover, the user-centric approach bridges data collection and behavioural change, something rarely achieved in this domain. REDUCE doesn't just monitor waste—it explains it, predicts it, and empowers catering services to act effectively based on real insights.

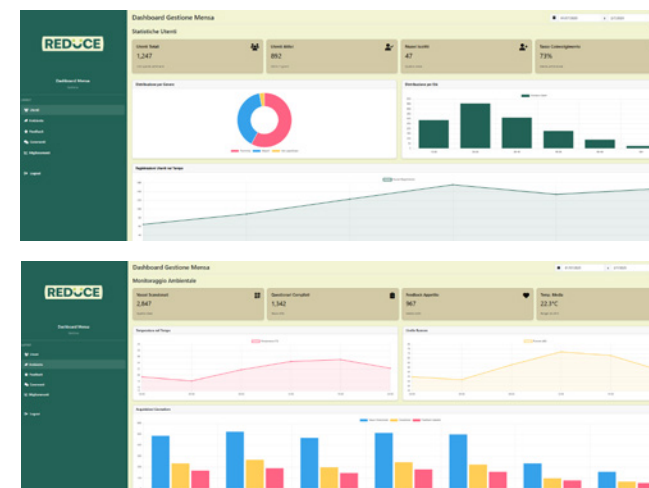
## Increased data sovereignty

REDUCE leverages the Data-U infrastructure to give users full control over their data. Users are transparently informed of how their feedback and behaviour data are collected and used, and they can opt in or out at any time. No sensitive data are collected beyond what's strictly needed for analysis, and all data are pseudonymised. Through the REDUCE web interface, users can track their impact and view their own food waste trends, enhancing transparency and awareness. Our approach ensures that behavioural data are treated ethically, while still enabling rich insights for public good.



## Main value of the programme

FOODITY has provided the framework and funding to transform REDUCE from a prototype into a real-life solution. It enabled us to integrate advanced AI and privacy-respecting data infrastructure while piloting the system in a public hospital canteen. FOODITY facilitated partnerships with key tech and research players, expanding both our technical capability and impact potential. Most importantly, it challenged us to align innovation with citizen data sovereignty, pushing us to create a user-centric, ethically responsible product.



## Testimonial

It's been a great opportunity! Not only for the development of our own technology, but also for the fresh wave of innovation we experienced through our interactions with the other project teams. Strong connections were built during the kick-off meeting in Vienna, and it feels especially rewarding to know that all of us involved are doing our best to improve food systems across the EU—and hopefully, soon, beyond its borders.



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**The Good Club** – Cluster  
**Agriventures** – Non-profit organisation

### Main project contacts

**Teodora Grigorova**

### Additional contributors

**Bozhidar Grigorov**  
**Dilyana Kutsarova**  
**Mariya Hristova**  
**Alexander Panayotov**

### Links & contacts



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[agriventures.co](https://agriventures.co)



[start@agriventures.co](mailto:start@agriventures.co)

## The project

The project connects sustainable local food producers with responsible companies through a digital platform that transforms employee benefits into tools for positive impact. Companies can offer sustainable products to their teams, enhancing their CSR strategies while directly supporting eco-conscious agriculture. The platform includes an online shop, tracks the ecological, economic, and social impact of each transaction, and ensures data privacy in line with GDPR. By promoting transparent, informed consumption and empowering employees to make sustainable choices, the project fosters stronger local food systems, reduces CO<sub>2</sub> footprints, and builds a more community-driven approach to corporate sustainability.

## The challenge

The project addresses key challenges in the sustainable food system by tackling the disconnect between eco-conscious producers and responsible companies. Sustainable producers often face limited market access, lower yields, and financial instability, while companies struggle to meet CSR goals with measurable, impactful actions. At the same time, employees lack transparent, accessible information to make sustainable food choices. Our platform bridges these gaps by enabling companies to offer sustainable products as employee benefits, supported by clear impact metrics. It promotes fair compensation for producers, empowers informed consumption, and ensures data privacy, all while enhancing corporate sustainability performance.

## Key results

We have developed a functional digital platform that connects sustainable producers with socially responsible companies through employee benefit programs. The solution includes three core components: a Producer Portal for managing product listings and orders, a Company Portal with basic impact reporting, and an Employee Portal offering an online shop with sustainable products and coupon-based ordering. The platform enables transparent sustainability scoring, tracks environmental and social impact, and ensures GDPR-compliant data privacy. In short our platform connects responsible employers, their employees, and local sustainable producers in a single marketplace.

## The value

Our solution uniquely combines sustainability, employee benefits, and data-driven transparency in one platform. Unlike conventional food delivery or CSR tools, it enables companies to directly support sustainable producers by offering their products as employee benefits, linking daily consumption to measurable sustainability impact. The platform integrates real-time ecological, economic, and social metrics, empowering informed choices and enhancing corporate sustainability reporting. It simplifies decision-making with clear sustainability scores and ensures GDPR-compliant data handling. By aligning incentives for producers, companies, and employees, our platform fosters a systemic shift toward responsible consumption and resilient local food systems—something rarely achieved in one integrated solution.

## Increased data sovereignty

Our platform ensures personal data sovereignty by prioritising privacy, transparency, and informed consent throughout the user journey. All personal data—such as names, emails, and delivery addresses—is stored securely with user consent and protected by encryption and role-based access. DataU is built into The Good Club platform to handle user consent during sign-up and account approval. It lets people give, review, and change their permissions through a clear and secure interface. All consents are stored in one place, so users always know how their data is used and can update their choices at any time.

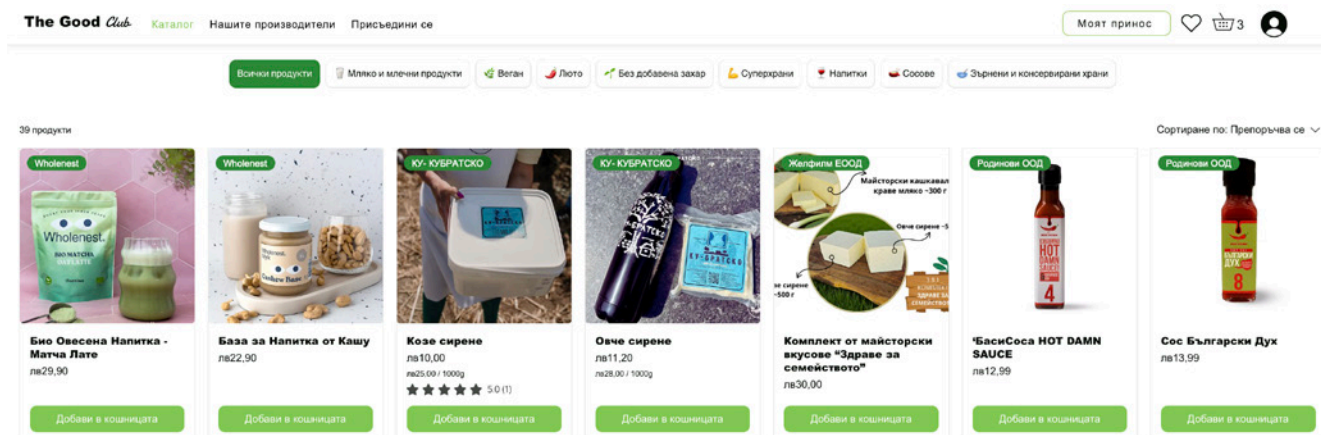
## Main value of the programme

The FOODITY project played a key role in the development of our SEBP solution and promoting citizen-centric, data-driven innovation in the food and nutrition sectors. It empowered many individuals to actively engage in sustainable consumption while safeguarding their data rights. By supporting the integration of tools like dataU

and Datalake, FOODITY enhanced transparency, accountability, and impact measurement across food systems. Thanks to 760+ engaged citizens, more people now understand what sustainable food really means—and how their data is used. It's turning everyday shoppers into conscious consumers. Now, producers are stepping up to improve their practices and stand out.

## Testimonial

Participating in the FOODITY programme has been a truly inspiring experience. The programme offered just the right balance between structure and flexibility, allowing us to stay focused while exploring new opportunities. We especially appreciated the open, collaborative atmosphere and the chance to exchange ideas with other forward-thinking teams. FOODITY has not only accelerated our project—it's helped us think bigger, act more responsibly, and feel part of a meaningful movement. The main benefit of participating in the FOODITY Programme has been the funding and the mentorship, which allowed us to fully focus on developing the project.



# TRACE-IT

Transparent AgriFood chain for ethical and innovative traceability



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

Trusty – Company

DiSSPA (UniBa) – University department

### Main project contacts

Alessandro Chelli

Francesco Bozzo

### Additional contributors

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Di Cosola, Federica Calderoni,

Emanuela Tria, Enza

Campanella, Adele Campobasso

### Links & contacts



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## The project

The proposed solution aims to address the challenges faced by the European food industry in meeting stringent EU Green Deal regulations, such as the EUDR and CSDDD, by ensuring comprehensive traceability and sustainability verification across global supply chains for high-risk commodities like cocoa and coffee. It seeks to balance regulatory compliance with consumer demand for transparency, while safeguarding GDPR-aligned data privacy and sovereignty. By overcoming issues like data fragmentation, lack of interoperability, and limited engagement with small-scale producers, the solution strives to create a citizen-centric, efficient, and transparent food system.

## The challenge

The solution focuses on developing an advanced traceability platform compliant with EUDR and CSDDD regulations. The objective is to empower small-scale farmers with digital tools for sustainability documentation and market access, enabling food companies to verify and communicate the sustainability of supply chains. The scope includes blockchain-based traceability integrated with satellite imagery, user-friendly interfaces for stakeholders, and privacy-preserving technologies. Pilot programs focus on cocoa and coffee supply chains, providing a scalable model for other high-risk commodities.

## Key results

- Development of an operational end-to-end traceability platform for cocoa and coffee.
- 100% compliance with EUDR regulations for participating companies.



- 30% increase in consumer engagement with traceability information.
- 50% reduction in the time required for compliance documentation.

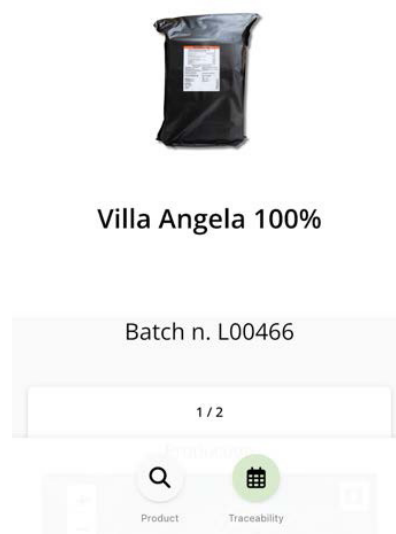
## The value

Our solution uniquely combines full EUDR and CSDDD compliance with a citizen-centric approach to data sovereignty and supply chain transparency. Unlike others, it integrates blockchain, satellite imagery, and privacy-preserving technologies to deliver end-to-end traceability for high-risk commodities like cocoa and coffee. It empowers small-scale producers with user-friendly tools, enabling efficient sustainability documentation and improved market access. The platform overcomes fragmentation and interoperability gaps, while increasing consumer trust and engagement. Pilot results show a 50% reduction in compliance time and a 30% rise in traceability interaction—offering a scalable, efficient, and GDPR-aligned model for the food and nutrition sectors.

The screenshot shows a mobile app interface with a top status bar displaying the time as 21:52. Below the status bar is a navigation bar with a back arrow, a search icon, and an 'EXPORT' button. The main content area is a form titled 'Add new product' with three sections: 'Parcel Code', 'Producer Code', and 'Area in ha'. Each section has a text input field and a 'SAVE' button. The 'Parcel Code' section shows a sample entry: 'Parcel Code: camp\_1', 'Producer Code: farm\_1', and 'Area in ha: 4'. The 'Producer Code' section shows a sample entry: 'Parcel Code: pick\_1', 'Producer Code: farm\_2', and 'Area in ha: 2'. The 'Area in ha' section shows a sample entry: 'Area in ha: 2'. At the bottom of the form is a 'SAVE' button.

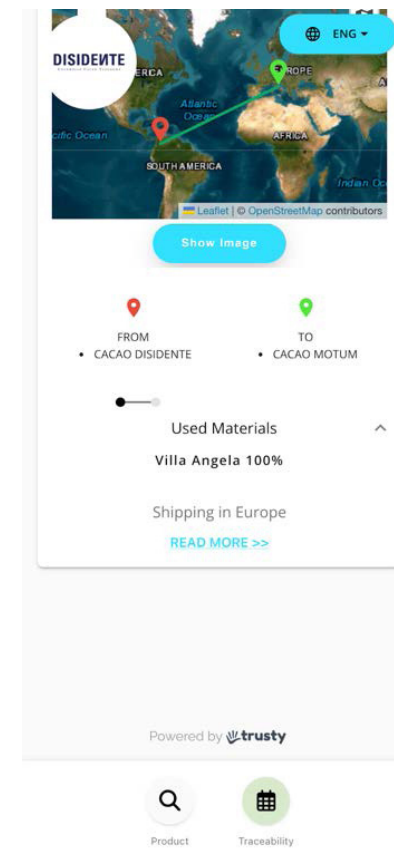
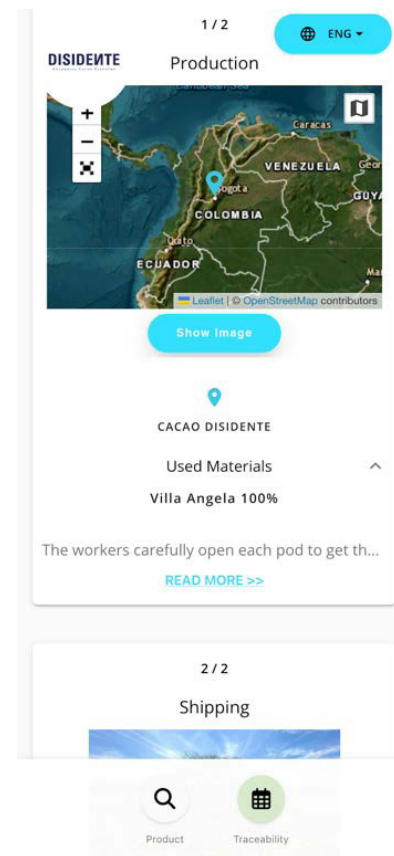
## Increased data sovereignty

Our project places a strong emphasis on citizens' data rights and personal data sovereignty throughout the entire food supply chain. With the support of DataU, we will implement a consent management system to facilitate data sharing between companies and cooperatives. To enhance understanding of the system and ensure compliance with data ownership rights, an Interactive Data Journey Map will also be developed. This map will demonstrate how data flows through the supply chain, highlighting key control points where users can manage their data.



## Main value of the programme

FOODITY enables secure and responsible information sharing across the entire agri-food supply chain. The project also enhances the role of SMEs and local communities by providing concrete tools to improve trust, traceability, and the sustainability of food choices, in full compliance with European regulations (e.g. EUDR, GDPR, CSDDD).



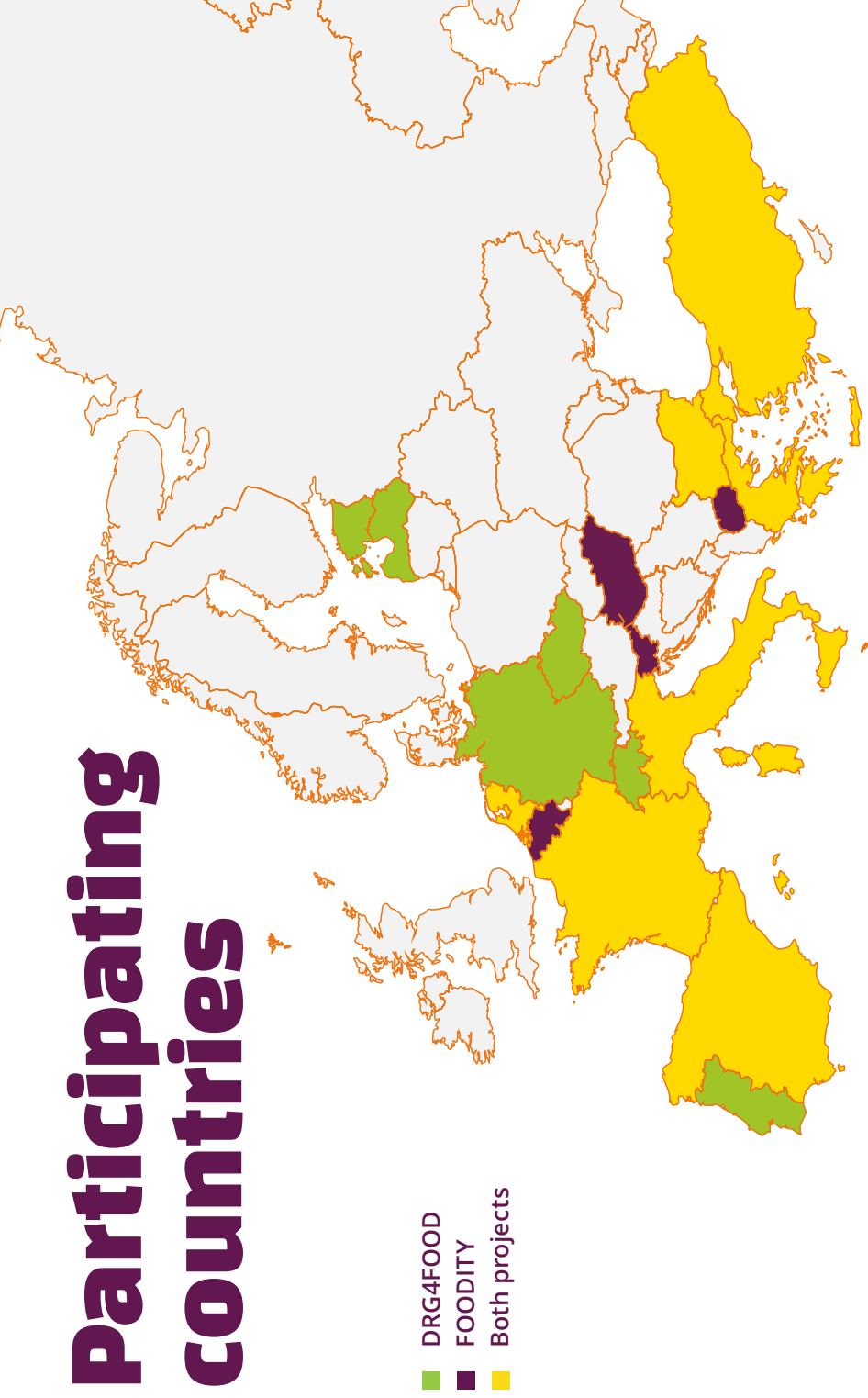


# **DRG4FOOD** **&** **FOODITY**

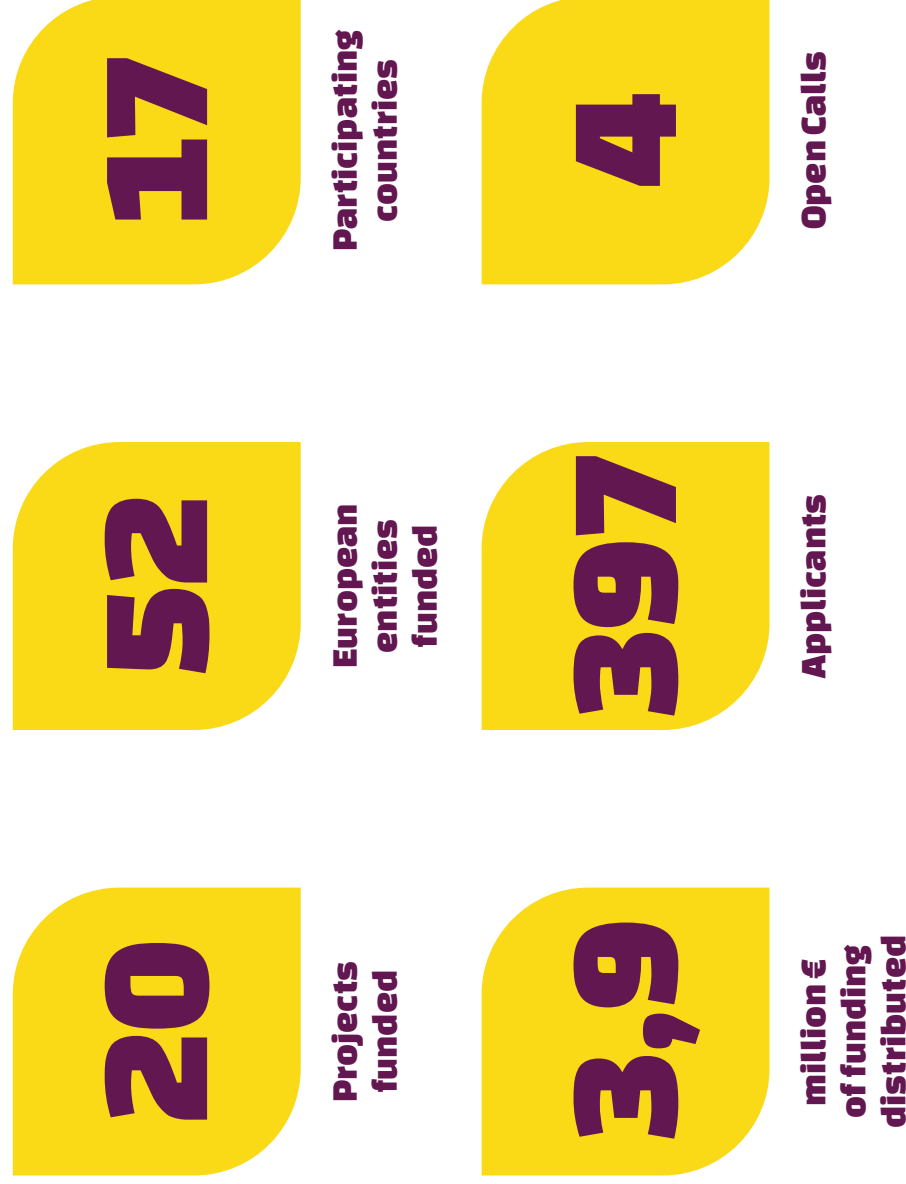
**Piloting approaches  
and tools to empower  
citizens to exercise their  
“data rights” in the area  
of food and nutrition.**



# Participating countries



## The projects in numbers





# Main topics addressed by the Open Calls



**Food  
Tracking**



**Targeted  
Nutrition**



**Consumers'  
food choices**



**Personalised  
Nutrition and  
Health**



**Sustainable  
Food Practices**



**Food Quality  
and Integrity**



**Fair Practices in  
Food Systems**



# **A RECIPE FOR CHANGE**

Success stories in food, data & innovation  
from FOODITY & DRG4FOOD Innovators



**DRG4**  
**FOOD**

# Introduction

## Citizens hold a pivotal role in shaping the food and nutrition value chain.

As final consumers, their behaviors, choices, and preferences can influence the trajectory of food systems towards greater sustainability. However, these transformative opportunities are often constrained by limited access to personal data insights and knowledge about consumption patterns paired with lack of trust in digital solutions and services.

At DRG4FOOD, we believe that unlocking the potential of digitally responsible practices is key to empowering citizens to make informed decisions about their food and nutrition choices. By fostering solutions that prioritize digital responsibility along the Digital Responsibility Goals, we aim to bridge the gap between citizens' aspirations for healthier and more sustainable diets and the tools they need to achieve them.

This Success Story Booklet celebrates the achievements of projects that exemplify the principles of data sovereignty, innovation, and impact. The initiatives highlighted here demonstrate how responsible data practices can inspire trust, encourage participation, and drive meaningful change in the food and nutrition ecosystem.

Through the efforts of DRG4FOOD and its partners, we continue to support a future where citizens are not only consumers but empowered agents of change, actively shaping the sustainable food systems of tomorrow.

DRG4FOOD contributes to this Success Story Booklet with the results of its 8 pilot projects that participated in two DRG4FOOD Programmes.





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# **The DRG4FOOD Innovators**

# DISH

If we can customize sneakers, we can customize food—  
DISH helps realize the EU Food 2030 strategy's goals and pathways



## PROJECT ID

### Beneficiaries



### Main project contacts

Dr. Sven Niedner  
Anta Sparinska  
Uwe Schröder

### Additional contributors

Inga Reine  
Vita Morica  
Alicia Faust

### Countries



### Type of organisation

Synamic Technologies - SME  
Bulduru Technical School Ltd - SME  
Deutsches Institut für Sporternährung - NGO

### Links & contacts



[www.synamic-technologies.com](http://www.synamic-technologies.com)  
[www.bulduri.lv](http://www.bulduri.lv)  
[www.dise.online](http://www.dise.online)



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## The project

The idea of the DISH project was created out of frustration with existing recipe apps and their restrictions. The DISH mission is to revolutionize home cooking by providing individualized cooking recipes for a healthier, and more sustainable diet. For this purpose, the project has developed a technology that allows for modification and optimization of cooking recipes with respect to individual nutritional requirements.

## The challenge

DISH addresses three challenges.

Reduced capacity to cook is explained by the lack of time or interest in sophisticated cooking, physical or mental limitations of the person concerned or unavailability of ingredients. Simplification of recipe is important to ensure an all-inclusive approach.

Food waste. According to EUROSTAT, in 2021, households generated 54 % of food waste. The other 46 % was waste generated upwards in the food supply chain. Household food waste is nearly twice the amount of food waste arising from other food related sectors.

Unavailability of ingredients, and adaptation of volumes and portions.

## Key results

To increase personal data sovereignty, DISH uses a decentralized identity model where user profiles are stored locally on the device and never shared with third parties. For necessary server communication, a temporary, anonymous identity is generated to

prevent user profiling.

The system allows self-sovereign control over personal attributes, meaning users can individually select which data to share. No location tracking or sensitive health data is collected. This architecture ensures maximum user control and complies with digital responsibility principles, enabling trust and privacy in personalized food and nutrition services.

## The value

Following the principle of Human Agency and Identity DISH created a database for potential replacements and substitutes to deal with situations where a certain ingredient is either not available or not fitting the individual dietary requirements of the end user. Based on the ingredient baseline and the individual profile, DISH algorithm proposes individual recipes that combine the two aspects.

## Digital responsibility goals

The project ensures and enhances the respect of the Digital Responsibility Goals principles through concrete actions. User profiles are stored locally as decentralized identities, with no sharing to third parties, ensuring privacy. Ephemeral identities are used for server exchanges, preventing user profiling. Data fairness is supported by allowing third parties to contribute to the ingredient baseline, promoting local food systems. Trust in algorithms is built through explainable AI integrated into the user interface. Transparency is achieved by allowing users to verify data sources. A substitution strategy supports human agency by offering personalized alternatives based on dietary needs.

## Main value of the programme

DRG4FOOD enables the DISH project to demonstrate a novel, personalized and privacy-preserving approach to digital nutrition. It provides a platform to test decentralized identity models and ingredient replacement algorithms in recipe generation. The support has allowed the consortium to develop a proof-of-concept that respects digital responsibility principles, promotes healthy eating, reduces food waste, and empowers users through data sovereignty. With this funding, DISH builds a foundation for a scalable, user-centric application that supports individual dietary needs while contributing to sustainable and inclusive food systems in line with the EU's Food 2030 vision.

## Testimonial

Participating in the DRG4FOOD programme has been an inspiring and empowering experience. It gave us the opportunity to turn a simple but powerful idea into a functioning prototype, while staying true to core values like data privacy, user empowerment and sustainability. The programme encouraged collaboration across disciplines and countries, helping us to explore new technological pathways and real user needs. We appreciated the flexibility and professional support from the DRG4FOOD team. It's not just funding – it's a meaningful push to create digital solutions that matter. We're excited for what's next and proud to be part of this journey.





# Cacao-Tech

From Waste to Value: unlocking cacao's full potential with data, trust and circular design



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**Pacha de Cacao B.V.** - SME

**Wageningen Research** - Research Institute

**Czech University of Life Sciences Prague** - University

### Main project contacts

**Marika van Santvoort** - Pacha de Cacao

### Additional contributors

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**Bert Dijkink** - Wageningen Research

**Jana Kholova** - Czech University of Life Sciences Prague

**Jeroen Roomer** - Vanilla Gorilla

**In collaboration with: Samantha**

**Quezney Lopez** - Wageningen Research

**Django Milner Vaas, Dilnaz Bazarova** - Pacha de Cacao

### Links & contacts



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### The project

Cacao-Tech addresses the challenges related to transparency, quality and ethical produce sourcing within the fragmented, informal, traditional cacao value chain set-ups where decisions rely on word-of-mouth rather than data. We are developing a context-specific, modular digital system—at farm, aggregator, and buyer level—for traceability and real-time quality control using portable NIR technology. The system is designed responsibly using the key DRG principles of privacy, fairness, and transparency. Developed in a low-trust, non-EU context, it offers role-based access and information-use of consent and control. This tool will bring users step ahead with regulatory compliance and information management. Solutions are being charted for scale-up and adoption.

### The challenge

The cacao value chain operates in an opaque manner and is fragmented. Farmers often sell through informal networks, without records, contracts, or price transparency. Trust is currently based on personal relations, not verified data. In many cases, cacao is traced unresponsibly via WhatsApp or paper. Most farmers lack access to digital tools or data protection, making them vulnerable to exploitation. Moreover, 80% of the cacao pod, including the pulp, which makes up 30% of the fruit, is mostly wasted. Buyers increasingly reward quality. Cacao-Tech responds by introducing field-based, real-time NIR-based quality control system and farm-level traceability tools. We address infrastructure gaps and fragmented systems with a flexible, practical solution tailored to real-world, real-time value chain dynamics.

## Key results

We developed and piloted three technical solutions: a portable NIR-based quality control tool, an information traceability system, and a mobile Central Processing Facility to valorise waste streams. The system is open-source and implements core DRG principles. We focused on data transparency, fairness, data privacy, tools trustworthiness and cybersecurity. Field visits confirmed that adoption depends on context, so flexibility in tool development is essential. Our contribution to the DRG toolbox includes user flows, risk mappings and consent protocols from a non-EU setting. The tools link farmers, aggregators and buyers—and offer consumers verified, story-based transparency.

## The value

Cacao-Tech stands out because it brings together six elements rarely combined. First, it applies portable NIRS for in-field cacao quality control—a technology that benefits other crops value chains, but not yet in cacao. Second, it integrates quality, traceability and by-product valorisation in one system. Third, developed in a low-trust, non-EU context, it ensures role-based access and consent-driven data use. Fourth, it unlocks value from waste streams like pulp and husk, creating new market opportunities. Fifth, it prepares smallholders for regulatory shifts and market entry while providing key information for consumers. Sixth, it transforms low-tech chains into inclusive, transparent, fair benefit sharing and future-ready value networks.

## Digital responsibility goals

We began by focusing on cybersecurity, data fairness, and citizen empowerment. Based on pilot feedback, we added privacy, implementing data models and ownership principles that give individuals agency—especially in contexts lacking formal digital rights. We applied DRGs not only to farmers but across the entire value chain, reaching consumers to support informed choices.

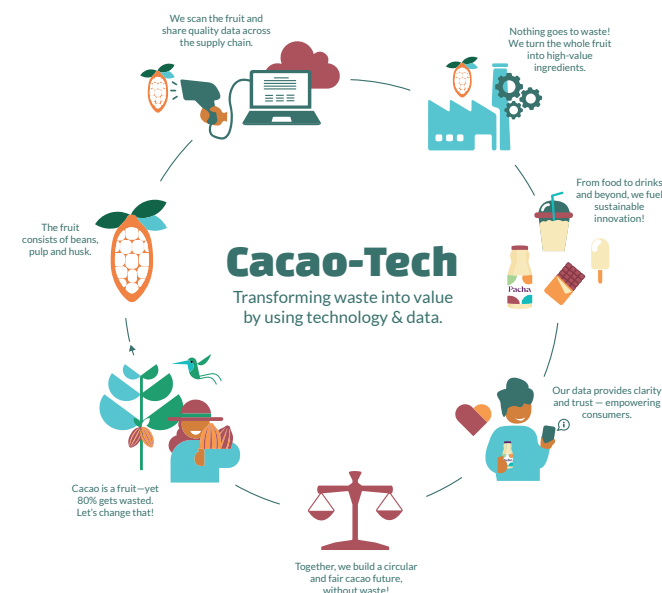
Our contributions to the toolbox include a demo of tracking/tracing software, a quality control module, tested consent protocols, user stories, and contextual risk analysis from a non-EU, low-regulation setting. By embedding DRG into traceability, quality, and circularity systems, we show responsible digital infrastructure can emerge through engagement.

## Main value of the programme

DRG4FOOD gave us the opportunity to test and refine our technology within a manual, informal supply chain, using a fresh perspective. It shows us both the challenges and advantages of applying digital principles like privacy and data fairness in settings where such concepts aren't formally recognized. The project allowed us to engage stakeholders, understand their needs, and design supportive—not burdensome—technological solutions. It fostered cross-disciplinary collaboration, encouraged context-sensitive design, and ensured tools provided real value. DRG4FOOD also expanded our network, deepened our understanding, and helped us connect previously fragmented efforts—laying a strong foundation for future development and impact.

## Testimonial

Though technical innovations often begin in labs or boardrooms, their true value is revealed in real-world application. This project highlighted the complexity of that journey. Coming from diverse disciplines with different expectations, collaboration was sometimes difficult—misunderstandings, shifting timelines, and on-the-ground challenges tested our assumptions. Yet these very hurdles strengthened the outcome. We learned from one another, tested ideas in the field, and developed solutions that genuinely support the people and value chains we serve. Thanks to DRG4FOOD, we had the space to explore, adapt, and innovate—ultimately contributing to improved livelihoods for vulnerable communities that need it most.





## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**GUNDO** - SME  
**ADN Institut** - SME  
**i3S** - Research Institute


### Main project contacts


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 Marina Riera  
 Luisa Mesquita

### Additional contributors

Priscila Silva, Magali Pezzarini, Luciano Heitt, Nahuel Rosas, Bruno Marinich, Facundo Ballesteros, Yamile Márquez, Jessica Fernández, Noelia Martínez, Ana Cristina Magalhaes

### Links & contacts

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### The project

GENIE integrates genetic, gut-microbiota and biochemical blood data with live retail inventories to deliver scientifically validated, Stock Keeping Unit (SKU)-level grocery recommendations. Working with Spanish retailer Ametller Origen, the GENIE's white-label SaaS analyses more than 100 biological and lifestyle parameters per user, scores each shopping basket and suggests healthier replacements in real time. Consumers receive clear explanations and actionable tips, while retailers improve loyalty and average order value. The platform's privacy-by-design architecture keeps sensitive information in an encrypted EU vault controlled by the user, fully aligned with the Digital Responsibility Goals. GENIE aims to reduce diet-related disease through preventative personalized nutrition.

### The challenge

Current supermarket recommendation engines ignore individual biology, yielding generic advice and low trust. GENIE tackles three intertwined challenges: (1) translating complex multiomic data into daily food choices; (2) embedding that intelligence directly inside the shopping journey rather than in a separate medical setting; and (3) guaranteeing privacy, security and responsible data use in compliance with the Digital Responsibility Goals. By overcoming these barriers, the project addresses rising chronic disease, information overload and skepticism towards AI-driven nutrition tools.

### Key results

GENIE validated its entire value chain at near-commercial scale. A campaign with Ametller Origen attracted 3 199 volunteers and processed 1 000

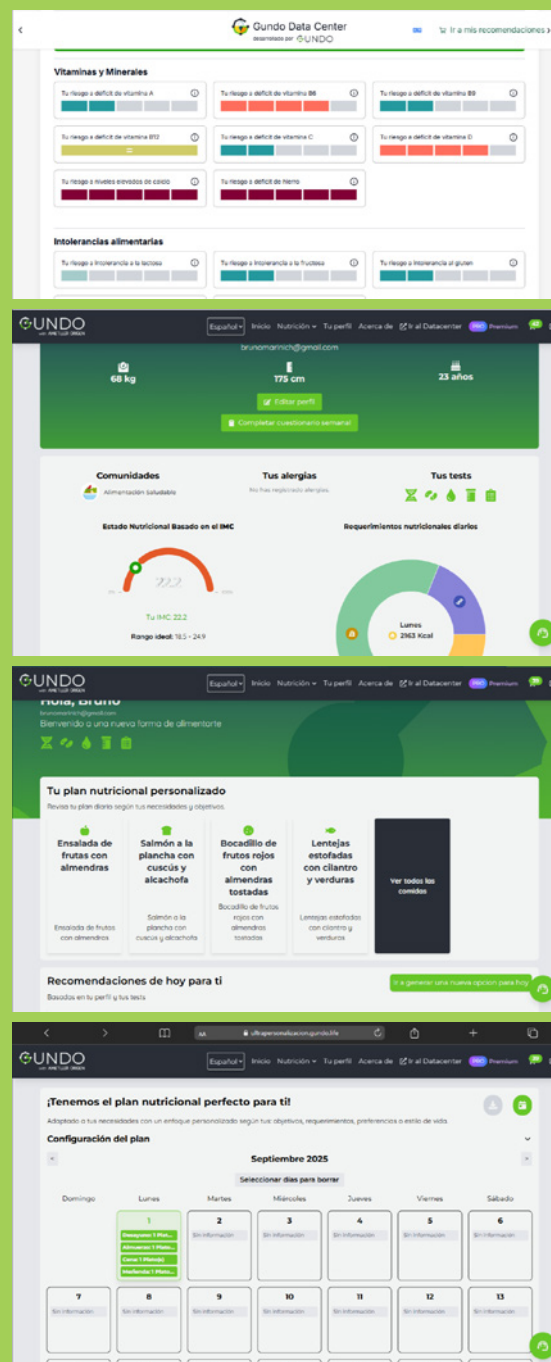
multi-omic kits. Sample return rates hit 97 % for nutrigenetics and 93 % for microbiota, proving logistic robustness. The cloud platform ingested genetics, microbiota and blood markers, enriched 9 500 SKUs and delivered real-time basket scores and product swaps inside Ametller’s e-commerce. Almost 91% of users rated daily recommendations “clear and useful,” while integration APIs operated at 99.9 % uptime. The pilot confirmed scalability, scientific validity and strong consumer appetite for personalized nutrition.

## The value

Unlike generic apps, GENIE harnesses laboratory-grade multiomic data, synchronizes with live supermarket stock and delivers SKU-level guidance at checkout. Competitors typically focus on a single data layer (e.g. genetics only) or operate outside retail systems. GENIE’s white-label model lets any grocer deploy the service without expensive R&D, while its privacy-by-design architecture and strict adherence to DRGs strengthen consumer trust. The combination of scientific rigor, seamless integration and responsible data governance is unmatched in the personalized nutrition market.

## Digital responsibility goals

GENIE implements DRG4FOOD’s Digital Responsibility Goals by storing all sensitive health data inside an EU-based, encrypted vault controlled by the user. Algorithms are explainable: each recommendation is accompanied by a rationale derived from nutritional, genetic and microbiota rulesets. Our contribution to the DRG4Food toolbox consists of two key assets: (1) the anonymized dataset generated during the scientific study evaluating the health impact of the GENIE solution, and (2) the study



itself, including methodology, results and ethical frameworks. These resources are intended to support future research and implementation efforts aligned with responsible data use in personalized nutrition.

## Main value of the programme

The DRG4Food incubation gave GENIE access to €300k in equity-free funding, expert mentors in digital responsibility, and direct links to pilot partners such as Ametller Origen. Workshops on data ethics and business modelling accelerated product readiness by 9 months. The European network also opened doors to Portuguese research powerhouse i3S, enriching the project’s scientific backbone and validating its methodology. Without the program’s ecosystem and visibility, rapid market entry would have been impossible.

## Testimonial

*“DRG4Food turned a bold idea into a deployable solution. The mentoring, funding and credibility we gained have been game-changers—GENIE simply wouldn’t exist at this speed without the programme.”*

– Priscila Silva Delgado, Founder of GUNDO



# PINACLE

Promoting personalized nutrition and health awareness, by matching food donations with recipient needs and reducing food waste



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

**Konnecta** - SME

**Co2gether** - Non-profit

**Uniroma** - University

### Main project contacts

**Harris Niavis** - Konnecta

### Additional contributors

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**Maria Zafropoulou** - Co2gether

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### The project

PINACLE is a digital tool that uses AI to create healthy and personalized recipes based and matched with the food donated by the food banks and the individual health and dietary profiles of the recipients—such as older people, children from Roma communities, and families who live in poverty. The solution integrates a user-friendly mobile app and an admin dashboard, co-created with end-users, to optimize foodbank operations, promote health awareness, and reduce waste. PINACLE also incorporates advanced identity tech to protect user data and privacy.

### The challenge

Traditional food bank systems often deliver one-size-fits-all food parcels that may not meet individual dietary restrictions or health needs. By integrating personalized recommendations and respecting privacy standards, PINACLE ensures that the right food reaches the right person, reducing food waste and promoting health. Also, it takes into consideration the recipients' context, such as lack of kitchen appliances (fridge, electricity, etc.) and access to supermarkets. At the same time, it empowers foodbanks with data-driven tools to manage donations more effectively and responsibly and it can become a standardized approach for all the food banks who do not currently share common protocols.

### Key results

PINACLE delivers a full-stack solution comprising: (a) a mobile app for recipients to receive personalized recipes and nutritional guidance; (b) a dashboard for foodbanks to manage donations with recipients and monitor distribution; (c) AI-powered matching algorithms that align donated food with individual

profiles; and (d) a privacy-preserving identity framework using blockchain-based technologies. The prototype has been successfully co-designed and pilot-tested with target users. To bridge the technology gap of the recipients, the app supports intermediaries such as caregivers, food bank's staff or the municipality's social services who can assist recipients with using the mobile application.

## The value

What sets PINACLE apart is its community impact, and the personalized nutrition matched on food donations and profile needs, backed by privacy-first architecture. Unlike generic food platforms, PINACLE delivers dietary recommendations aligned with everyone's health needs while efficiently allocating food donations. The use of DLT, Verifiable Credentials, and ZKPs ensures robust data, data privacy, user trust and compliance with EU regulations such as GDPR.

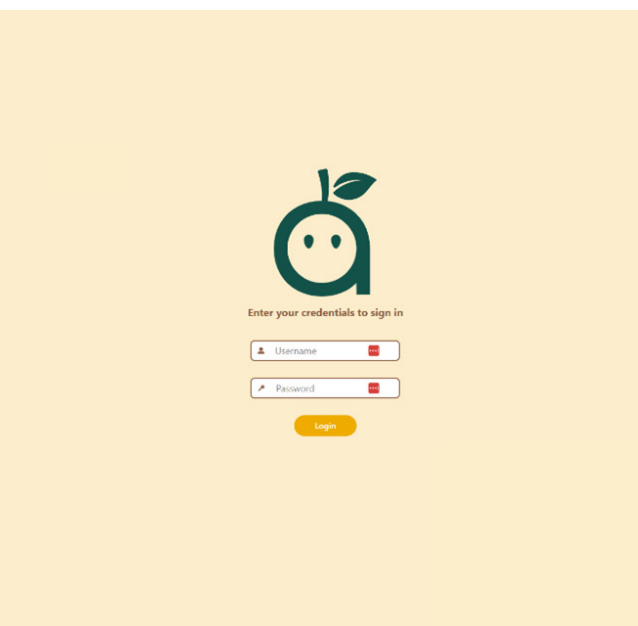
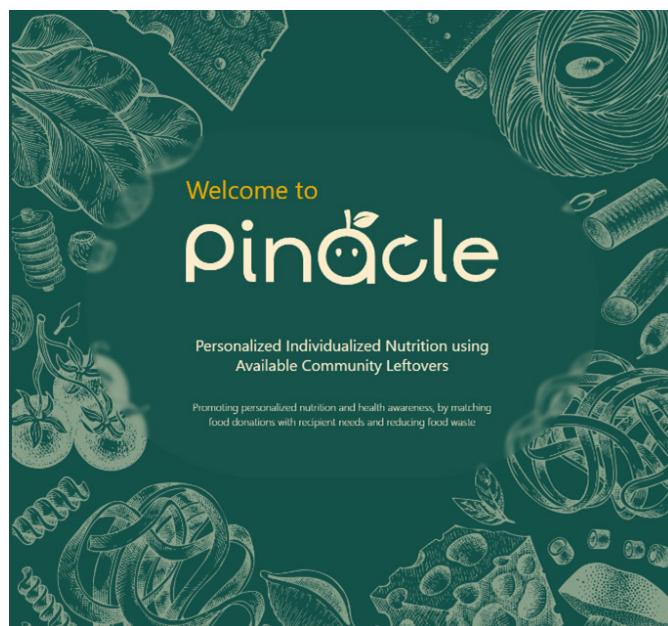
Its dual focus—optimizing foodbanks' operations and empowering individuals—combined with user co-creation, creates scalable impact. The system's modular design also facilitates replication across European contexts.

## Digital responsibility goals

PINACLE supports the DRG4FOOD Digital Responsibility Goals by embedding privacy-by-design principles and transparent data handling into its core. We contributed to the DRG4FOOD toolbox by providing smart contracts for verification of Zero-Knowledge Proofs (ZKPs) enabling privacy-preserving and trusted access control. Furthermore, we included real-world case stories and evaluation criteria for measuring impact on food security, nutrition, and trust—enriching the toolbox with tangible insights from pilot deployments.

## Main value of the programme

DRG4FOOD fosters a digital ecosystem where data-driven solutions respect ethics, privacy, and user sovereignty. PINACLE embodies this paradigm by applying the system's principles in nutrition, turning food donations into personalized health assets while preserving trust. The programme enabled collaboration across sectors—foodbanks, NGOs, Social services, research—to co-develop a privacy-respecting platform. It provided access to expertise and a peer network for sharing digital responsibility practices. Through validation in real scenarios and integration into the DRG4FOOD toolbox, PINACLE demonstrates replicable impact and sets a benchmark for future food-nutrition innovations aligned with digital ethics and sustainability.



## Testimonial

*"Being part of DRG4FOOD has been an enriching and transformative journey for our team. The programme's emphasis on digital responsibility challenged us to rethink data handling and trust in our designs, elevating PINACLE beyond a typical app. Working closely with target users—older individuals, social workers, and vulnerable groups—gave us real insight and empathy. The collaborative environment fostered by DRG4FOOD connected us with domain experts and peer innovators, fueling rapid iteration and impact. By aligning technology with ethical standards, we've created a solution we truly believe in—one that can make a real difference in people's lives."*

# ATTESTED

Open-source traceability connecting small producers and conscious consumers. Link every harvest to your plate with transparent, ethical data.



## PROJECT ID

### Beneficiaries

**FiBL**

Valdibella



### Main project contacts

Walter Pirri

Olivier Ejderyan

Jann Eike Kruse

### Additional contributors

Cristina Laurenti

Manolis Britzolakis

Gaspere Solano

### Countries



### Type of organisation

Valdibella - SME

FiBL - Research Institute

CommonsLab - SME

### Links & contacts



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## The project

ATTESTED, built upon the DRG4Food project, targets two primary user groups:

- 1) Small food producers seeking improved market access through enhanced product traceability and communication of production specifics
- 2) Environmentally conscious consumers demanding transparent, comprehensive information on food origins and quality.

The project emphasizes the consumers' rights to detailed nutritional and quality data, and producers' rights to fair compensation and recognition of their efforts. Utilizing a responsible, transdisciplinary approach, ATTESTED evaluates how increased transparency influences consumer behaviors, technology adoption, and product choices.

## The challenge

ATTESTED mainly faces 2 challenges from the perspective of the producers such as the reluctance and difficulties of small farms to deploy and use new technologies on the one hand and the unfamiliarity of certain consumer groups to scan QR codes for product information. On the consumer side, ATTESTED faces the fears and hopes of consumers regarding transparency, privacy and trust, the openness and social responsibility of the project and its outcomes and, finally, the efficiency and ease of use of the developed traceability system.

## Key results

The main outcomes of the ATTESTED project are on the one hand the open-source traceability device and cloud infrastructure, including the database and data visualization web interface, which are publicly available



through online software repositories. On the other hand, the insights gained through stakeholder interviews, and consumer focus groups, will be published in peer-reviewed journals and publicly disseminated through our social media accounts.

## The value

Unlike other traceability solutions that exist, ATTESTED focuses on open, trustworthy, responsible and ethical technology, which is also affordable and easy to use. Additionally, it not only provides numbers and dates, but also the context around these data, and it promotes a connection to the people and the stories behind the products.

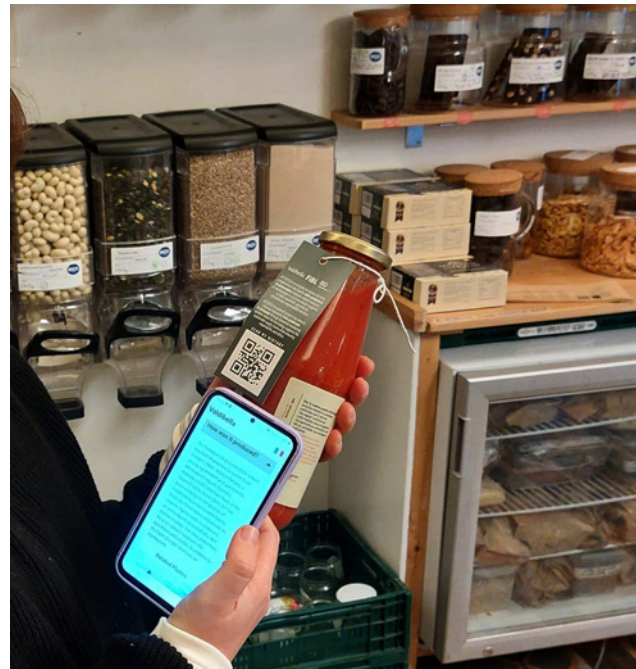
## Digital responsibility goals

To environmentally and socially sensitive producers, retailers and consumers, e.g. of bio products, fair-trade or solidarity shops, the Digital Responsibility Goals largely reflect the worldview. Basing ATTESTED on the DRGs aligned well with the expectations of the consumers, even though a lack of technical literacy may limit the understanding of the DRG's impact. We contributed a fully open-source traceability toolbox, an open hardware traceability scanner and a cloud infrastructure to visualize the traceability data. Additionally, we have gathered rich insights into the influences and impacts of such a system on the consumers' behaviour.

## Main value of the programme

We benefited not only from the well structured "DRG Playbook" but also from some of the tools that were collected in the "DRG Toolbox". The Playbook helped to guide our efforts, and the selected tools made them easier to implement. Additionally, we are learned

a lot on the way, both through the mentoring that we received and through the exchange of ideas and discussions with other DRG4Food projects.



## Testimonial

It was a pleasure to be part of the DRG4Food family, not only because of the excellent organization by the DRG4Food consortium, and because we were given the possibility to lean, to grow and to develop something worthwhile, but also because we had the luck to meet like-minded people, who we will hopefully soon be able to cooperate with again.

### Tomato puree

UNIQUE ID: #1008

The Valdbella tomato puree is an organic product made from carefully selected, sun-ripened tomatoes grown in Sicily. These tomatoes are harvested at peak ripeness and quickly processed to preserve their vibrant color, rich flavor, and nutritional content, including lycopene, a natural antioxidant.

Smooth in texture and deep in flavor, this tomato puree serves as a versatile base for sauces, stews, and other recipes where a fresh, authentic tomato taste is essential.

For a flavorful dish, try warming the puree in a pan after sautéing finely chopped carrots and onions in olive oil. The combination creates a deliciously aromatic base, enhancing the depth of the tomato puree's flavor.



### How was it produced?

The tomatoes that created the sauce you hold in your hands come from Giorgio's farm. Giorgio Ferrara, a young agronomist and passionate advocate of organic farming, manages a 35.5-hectare farm in the heart of Sicily. Since 2018, he has been working on the project of establishing a sustainable family farm. His farm relies exclusively on organic inputs such as seaweed, vermicompost, essential oils, and bovine manure. For crop protection, he uses natural solutions like pyrethrins and zeolite. In addition to the farm, Giorgio also runs an agritourism.

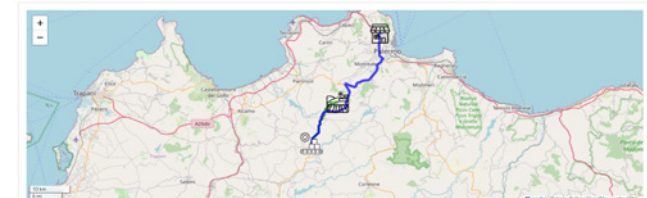
#### Related Photos



#### Related Videos



### Route from field to shop



Your product has travelled 57 km in total!  
(from the farm that its raw materials have been harvested to the shop that you bought it)

Specifically, the raw materials of your product have travelled 15 km from the Giorgio Ferrara's farm to Valdbella's factory (green trace) and your product has travelled 42 km from the factory to the "Nature 52" shop (blue trace).

The journey that food takes from the field to the point of sale contributes to its environmental impact, along with other factors such as the cultivation method used and the type of transportation chosen.

# NutriSight

A window to food nutritional transparency



## PROJECT ID

### Beneficiaries



### Countries



### Type of organisation

Open Food Facts - NGO  
El CoCo - SME

### Main project contacts

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### Additional contributors

Bertrand Amaraggi

### Links & contacts



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## The project

Nutritional information is crucial in assessing the quality of food products, but often, this data is presented to consumers in the form of nutritional tables, which can be challenging to comprehend.

This project aims to address this issue by developing a tool that can automatically extract nutritional information from a photograph of food product's packaging.

Leveraging deep learning techniques, our solution will encompass a machine learning model and an associated API, capable of operating in a highly multilingual context, enabling the extraction of nutritional data from photos across a wide spectrum of countries and languages.

## The challenge

Our project aims at simplifying the task of extracting nutrition information from images of food products by automating the process using a machine learning model.

Thanks to this technology, contributors to the Open Food Facts project and users of possibly any food scanning app will be able to get nutrition information (including the Nutri-Score) quicker and more easily.

It will directly contribute to improve the data completion and quality of the Open Food Facts database.

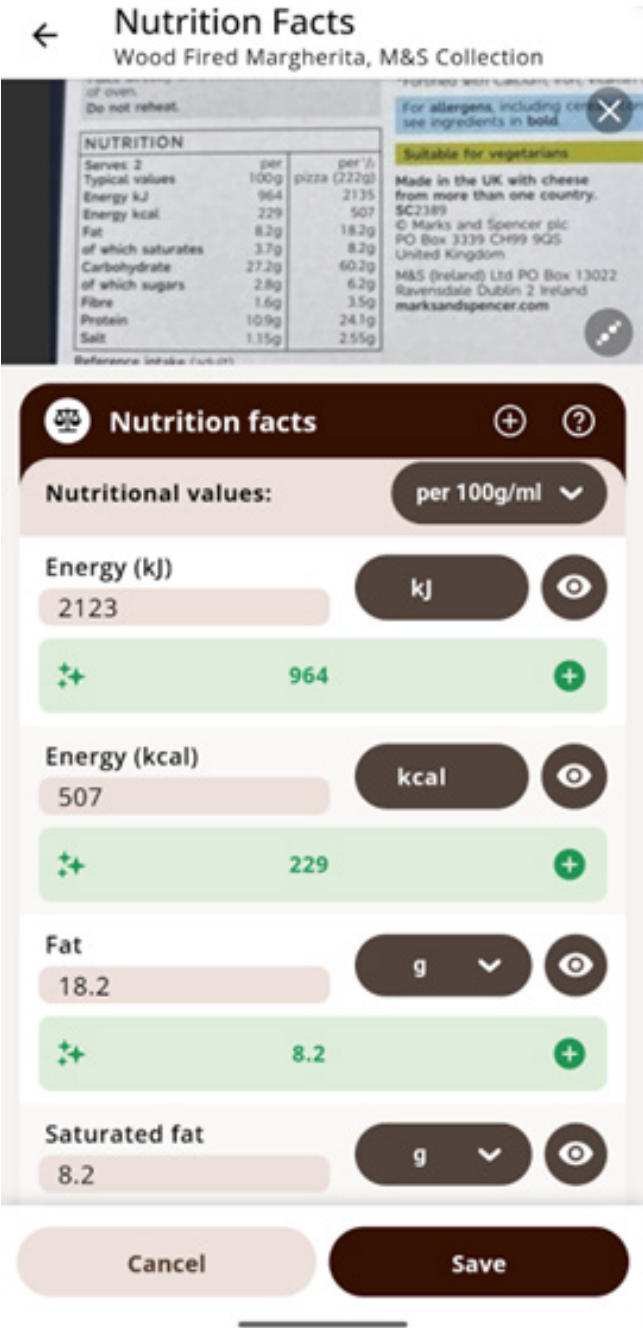
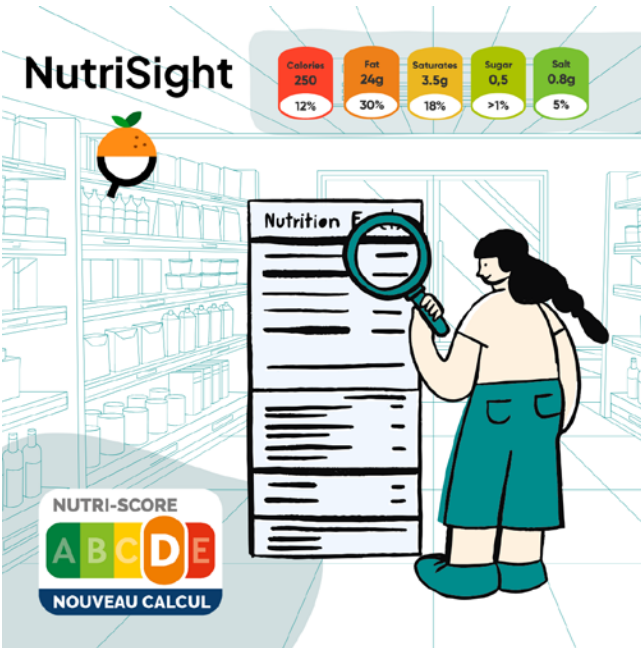


# Key results

We manually annotated more than 3400 images of food packaging containing nutrition information and trained a machine learning model on this dataset. It resulted in a strong model that performs well on many european languages. The model is rather lightweight and can run on CPU. It's currently deployed on Open Food Facts mobile app and website.

# The value

To the best of our knowledge, NutriSight is the first open model to extract nutrition information from images. Visual Language Models (vLM) are an alternative to perform this task, but are not as fast, require high-end GPUs to be used and have an environmental impact much higher than NutriSight.



# Digital responsibility goals

We followed DRGs best practices during this project with a specific concern on the Trustworthy algorithm DRG: the dataset, training code and model are fully open and auditable. Our contributions to the DRG4FOOD toolbox were the following: the NutriSight dataset, the NutriSight model and a demo script to easily test the model on any image.

# Main value of the programme

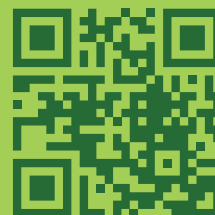
The DRG4FOOD program helped us to enhance our understanding of the DRGs, questioned our current practices related to the DRGs and assisted us in delivering the best solution as part of this project. DRG4FOOD also promoted the NutriSight project through communication (blog post, social networks, articles, etc.).

# Testimonial

We were very pleased with our participation to the DRG4FOOD program. We really liked being part of a program that included projects exclusively in the food domain, as we sometimes shared common challenges. Thanks to the DRG4FOOD program, we were able to invest a significant amount of time to develop this technology, which would not have been possible without this funding.

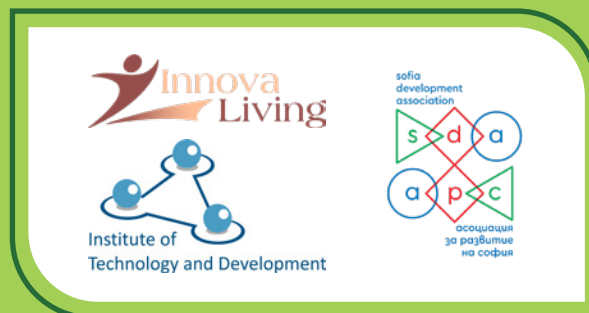
# NutriWell

AI-driven nutrition for health, inclusion, and a comfortable life for all



## PROJECT ID

### Beneficiaries



### Main project contacts

Roumen Nikolov  
Vladislav Jivkov

### Additional contributors

Svetlana Lomeva  
Alexander Chikalanov

### Countries



### Type of organisation

Innova Living - SME

Institute of Technology and Development - Non-profit NGO

Sofia Development Association - NGO

### Links & contacts



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### The project

NutriWell is an advanced AI-driven platform transforming personalized nutrition by combining health intelligence with social engagement. Through detailed user profiling, it delivers precise and adaptable meal plans aligned with individual dietary needs, health objectives, and culinary preferences. Standout features include cuisine-switching functionality and an integrated mini social network, enhancing user motivation, interaction, and long-term engagement. What sets NutriWell apart is its ability to provide deep personalization, flexibility, and real-time, actionable insights—powered by its innovative Nutrition Data Space. This holistic approach positions NutriWell as a next-generation solution in personalized, data-informed, and socially engaging nutrition planning.

### The challenge

The NutriWell project tackles key challenges in developing a highly personalized nutrition platform. It enables users to build detailed personal and medical profiles, define dynamic dietary needs, and generate individualized meal plans with real-time analysis. Recognizing the social dimension of nutrition—especially for elderly users—NutriWell integrates community features like cooking groups and virtual events. The project also addressed complex formal and technical tasks, including ontology development, multidisciplinary collaboration, continuous validation, and strict milestone adherence. All this was achieved within a tight 7-month timeline, resulting in a robust, user-centered solution that blends personalization, technology, and social engagement in nutrition.

## Key results

NutriWell has developed five AI-powered components for integration into the DRG4Food Toolbox, advancing the “Targeted Nutrition” use case. These include: a Nutrition Data Space aggregating anonymized datasets for evidence-based personalization; a Personal Data Wallet Adapter for securely storing individual health profiles; an AI Nutrition Plan Generator tailoring plans to user wellbeing data; an AI Cuisine Allocator matching dietary needs with cuisine preferences; and a Social Cooking Organiser fostering shared experiences among users with similar profiles. Collectively, these tools deliver a deeply personalized and socially engaging nutrition solution, aligned with DRG4Food’s vision for responsible, data-driven food system innovation.

## The value

NutriWell’s Smart Personalised Meal Planning stands out from competitors through its advanced AI-driven personalisation, seamless integration of gamification elements, and a built-in social cooking network. What sets NutriWell apart is its deep user engagement enabled by gamified features and its precise alignment with individual health and nutritional needs. Unlike generic alternatives that rely on limited profiling, NutriWell leverages cutting-edge algorithms grounded in nutritional science, offering a more tailored, impactful, and science-based user experience.

## Digital responsibility goals

The NutriWell solution is fully aligned with the DRG4Food Data Responsibility Goals (DRGs). Each of the NutriWell enablers corresponds directly to the DRGs and is a potential contribution to the DRG4Food Toolbox: Nutrition Data Space

(DRG#7,1,2,3 &4), Personal Data Wallet Adapter (DRG#7,1,2,3&4), AI Nutrition Plan Generator (DRG#5,1,2,3 & 4), AI Cuisine Allocator (DRG#5,1, 2,3 & 4) and Social Cooking Organiser (DRG#6, 1,2,3 & 4). These enablers demonstrate our strong commitment to the DRG4Food vision and contribute to the development of a trustworthy, user-centric digital food ecosystem.

## Main value of the programme

The NutriWell team greatly benefited from the expertise and support of the DRG4Food consortium, particularly from the guidance of our mentor, Karl Presser. The DRG4Food-organised workshops provided valuable insights that significantly contributed to the development of the NutriWell solution.

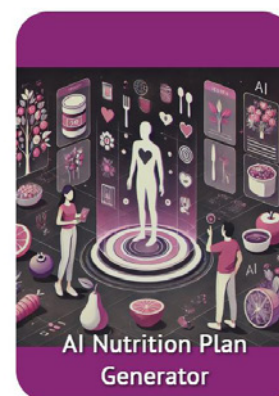
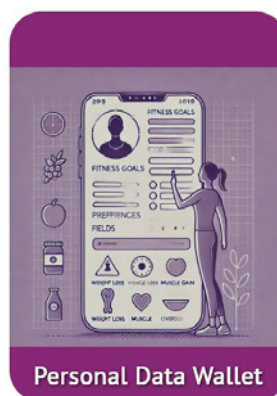
Several of the enablers we engaged with will be integrated into the DRG4Food Toolbox, and we are actively exploring the integration of specific tools from the Toolbox into future releases of NutriWell – including MyFoodData, Open Food Facts, and others.

## Testimonial

**Being part of the DRG4Food programme has been a truly positive and inspiring journey for us.**

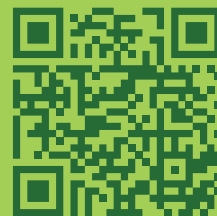
The support we received made a significant difference – not only through the funding but also through the genuine human connection behind it. Communication with the team was always smooth and efficient, and our mentor, Karl Presser, provided invaluable advice and guidance throughout the process. Quite honestly, without this support, bringing **NutriWell** to life would not have been possible. We felt that someone truly believed in our vision – and that belief gave us the motivation and energy to keep moving forward.

**A heartfelt thank you from the entire NutriWell team.**



# SafeNutriKids

We help children, their parents and educators find a smart and easy way to healthy personalized nutrition



## PROJECT ID

### Beneficiaries



### Main project contacts

Rosen Dimov

### Additional contributors

Darina Zaimova

Ozge Dinc

### Countries



### Type of organisation

Phasegrowth OÜ - Company

Trakia University - Research Organisation

Sabri Ülker Foundation - Research Organisation

### Links & contacts



[phasegrowth.com](https://phasegrowth.com)

[uni-sz.bg](mailto:uni-sz.bg)

[en.sabriulkerfoundation.org](mailto:en.sabriulkerfoundation.org)



[info@phasegrowth.com](mailto:info@phasegrowth.com)

## The project

The SafeNutriKids project is a human-centred initiative combining scientifically driven efforts of partners from Estonia, Bulgaria and Turkey. It aims at delivering AI-driven personalized nutrition education app with a focus on digital literacy for children aged 6-12. This project aims to integrate cutting-edge technology with interactive learning to enhance children's dietary habits and digital skills, ultimately contributing to better health and responsible digital citizenship.

## The challenge

SafeNutriKids tackled the lack of child-specific personalization in digital nutrition tools by developing an AI engine that tailors recommendations based on the user's age, culture, and dietary context. Without collecting intrusive data, it implemented strong privacy safeguards, including role-based access, minimal data storage, and GDPR-compliant consent by design. Its content was also aligned with national school curricula in Bulgaria, Estonia, and Turkey. Usability challenges across different age groups were addressed through direct user engagement. We supported parents in overcoming the typical barriers of time and budget when preparing healthy meals, while helping children build healthy eating habits through engaging and playful games

## Key results

SafeNutriKids has developed a digitally responsible, AI-powered nutrition education platform for children aged 6-12. The solution integrates a gamified Unity-based frontend, a Firebase-Google Cloud backend, and ChatGPT-based personalisation to deliver age-appropriate, culturally adaptive content.



Key results include the deployment of national pilots in Estonia, Bulgaria, and Turkey; the development of parental dashboards and consent mechanisms; open-source contributions to the DRG4Food Toolbox; and measurable behavioural engagement among 145 children and 112 parents. The system operationalises digital responsibility goals across its lifecycle—ensuring privacy, fairness, transparency, and alignment with school curricula in diverse institutional settings.

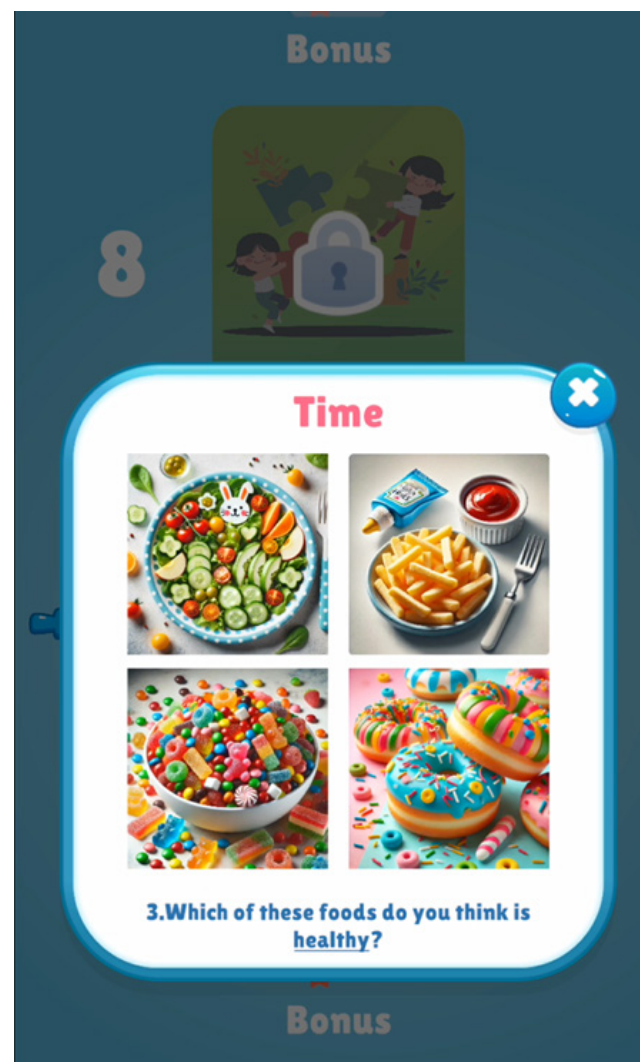
## The value

SafeNutriKids uniquely combines AI personalisation, gamified education, and rigorous digital responsibility in one scalable solution. Unlike food apps that focus on calorie tracking or adult dietary advice, it delivers child-centred, curriculum-aligned nutrition education with parental oversight and built-in consent controls. The system is culturally localised, privacy-preserving, and avoids vendor lock-in through an open–proprietary hybrid model. Its unique value lies in bridging public health, education, and ethical AI by enabling national-scale use while protecting children's data rights. Compared to market solutions, it offers deeper pedagogical alignment, stronger GDPR safeguards, and customisation for institutional adoption.

## Digital responsibility goals

SafeNutriKids embedded Digital Responsibility Goals (DRGs) across its system architecture, increasing user trust through transparent AI suggestions, consent management, role-based access, and data minimisation. Children and parents interacted with clearly labelled features that operationalised privacy, fairness, and agency in real-time. We contributed two components to the DRG4Food Toolbox: (1) a

localisation-ready parental consent module enabling granular control, and (2) a nutritional fairness tagging system for culturally adaptive dietary content. These open-source tools help future developers implement DRG compliance in child-focused applications, promoting systemic trust in ethical digital food systems across Europe and beyond.



## Main value of the programme

DRG4Food has been instrumental in enabling responsible innovation in child-focused digital health. It provided the SafeNutriKids consortium with a structured, operational framework for embedding digital responsibility across the solution lifecycle—from design to deployment. Access to the DRG4Food Toolbox and methodology accelerated our capacity to align with GDPR, enhance transparency, and deliver a trusted, ethically grounded platform. The programme facilitated exchange with other innovators, reinforced interdisciplinary collaboration, and positioned our work for institutional scalability. Most importantly, it elevated digital responsibility from a compliance issue to a core driver of impact, trust, and adoption.

## Testimonial

Participating in DRG4Food has been deeply rewarding and intellectually enriching. Beyond funding, the programme gave us a community of peers, mentors, and experts who genuinely care about making digital food systems more ethical, inclusive, and effective. The bootcamps helped us refine our product, gain critical feedback, and avoid common pitfalls. The support from the coordination team was responsive and strategic, encouraging us to think beyond minimum compliance and focus on long-term trust. We leave the programme with a stronger solution, new partnerships, and a clear roadmap for future impact—and we wholeheartedly recommend this experience to other mission-driven teams.