



ECOTROPHELIA
EUROPE

LIVE

THE FOOD INNOVATION LABORATORY



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OBJECTIVE:

FEED THE PLANET





I'm delighted to host the ECOTROPHELIA Europe contest at SIAL Paris in October. Talented students from 15 European countries are competing and showcasing innovative food projects, new recipes or processes, unexpected ingredients, and new packaging.

Actually, more than a competition, ECOTROPHELIA Europe is a state-of-the-art institution when talking about food innovation. In addition to being an incubator for new ideas, ECOTROPHELIA Europe highlights the food trends that are rising among the Millennials generation, and Generation Z.

I'm impressed by these young talents who are placing so much energy, passion and inspiration into creating sustainable yet affordable food products that are both healthy and delicious. They are the fuel and the future of the industry. They challenge the status quo, and it feels (and taste) good!

Against a background of intensifying climate changes, we have been exposed to a critical sanitary situation and its many consequences. We barely got our wind back that a major geopolitical crisis burst out. The current situation has a profound effect on the food supply, dietary patterns, and nutrition of billions of people.

In this context of big upheaval, expertise, inspiration, and innovations are key to rise above and turn the crisis into opportunities. This is precisely what SIAL Paris is aiming at: Inspire, enable efficient business connections, and give clear guidelines to support companies in committing to medium terms objectives and step changes.

I am optimistic. I believe in the power of the collective and that this complex period is an opportunity to reinvent the agri-food business.

I look forward to seeing you at SIAL Paris on Monday, October 17 to discover the winners of this year.

Audrey Ashworth
SIAL Paris Director



Fabiola DIONISI

PhD, Academic Alliances and Expertise Development, Nestlé



Nestlé recognises the innovation laboratory character of ECOTROPHELIA and its value to the food sector, reason why it supports ECOTROPHELIA initiative: ECOTROPHELIA Europe. This partnership is celebrated not only by the support given to the initiatives but also by the participation of ECOTROPHELIA projects in the company's acceleration program.

In 2019, Nestlé created the R&D Accelerator where project teams can rapidly translate ideas into prototypes for testing. The Accelerator program offers support from the start of the project to its end, with a "Lab to Shop within 6 months" vision. Intended for employees, start-ups and students, the program welcomes participants that want to explore a new technology, to translate new science or insight into a product or service, to pioneer a trend with a differentiating offer, or to test desirability and feasibility of a product idea. At the end, a Minimum Viable Product is tested directly in shops with consumers on a small scale to gather feedback from target consumers and with the aim of refining the concept.

« ECOTROPHELIA is a great student innovation competition full of positive energy and inspiration for the industry. It is also a window into the future of food as seen by the young generation » said Christoph Hartmann, Academic Alliances & Expertise Development Lead at Nestlé Research. "We consider our collaboration a real success. On one hand we get exposed to great teams and very good quality projects, on the other hand we give students the possibility of taking their project towards execution and commercialization. »

Since April 2019, four ECOTROPHELIA projects developed from higher education students have joined the R&D Accelerator, namely: KofCo, TempSta, Lady Culottée and Frosti.



KOF.CO

ECOTROPHELIA Germany 2018 Gold & ECOTROPHELIA Europe 2018 Bronze

Incubated from April to October 2019

A fruit & nut snack containing guaraná, a caffeine source, and microalgae for a naturally recharging and awakening effect. Four students from the Karlsruhe Institute of Technology – KIT (Germany)



LADY CULOTTÉE

ECOTROPHELIA France 2019

Incubated from September 2020 to February 2021

The first snack to relieve premenstrual and menstrual symptoms! Two students from Oniris Nantes (France)



TEMPSTA

ECOTROPHELIA Germany 2019 Gold & ECOTROPHELIA Europe 2019 Bronze

Incubated from June to December 2020

A nutritious snack made of organically grown fermented peas. Four students from the Technische Universität Berlin (Germany)



FROSTI

ECOTROPHELIA Europe 2020 Silver

Incubated from September 2021 to June 2022

Icelandic Skyr flakes - organic lactose-free powder with probiotics and rich in protein. Two students from University of Island





Bertrand EMOND

CAMPDEN BRI UK
Head of Membership & Training



What was special about the 2022 ECOTROPHELIA UK competition:

It was our 10th anniversary and we were back to face to face judging and tasting (!) following 2 years online!

Our ECOTROPHELIA UK competition is organised jointly by Campden BRI and the IFST; our partnership works really well - over the last 10 years, 500 students from 22 different UK universities have taken part. We have also been very pleased to get fantastic interest and involvement from the industry who have been supporting the competition through sponsorships and mentors, including: PepsiCo, Mondelez, Marks & Spencer, Warburtons, Unilever, Nestle, Tesco, Coca Cola and Sainsbury's. For our special celebration, Tesco kindly hosted the grand final and awards ceremony at their iconic Heart Building; very special indeed.



What are the major challenges that companies face and how relevant is ECOTROPHELIA?

This year, food companies have had to deal with a continuing health crisis (various waves of coronavirus variants across the globe), the continuing impact of Brexit as well as the Russia-Ukraine war and record weather extremes around the world (heat, draught, floods...)!

The impact on food companies and the whole food system has been profound.

The major short-term challenges have been around business continuity including staff availability, supply chain resilience, managing "just in case" as opposed to "just in time", ability to reformulate products to cope with shortages of key ingredients and/or minimising the impact of significant price increases, mitigating the risks of food fraud which are particularly high at the moment, ensuring the food safety, quality, traceability and integrity of products along very disrupted supply chains and new distribution channels to the consumers.

The level of scrutiny on the eco-credentials of businesses and their supply chains has also intensified greatly. There is a major push to:

- encourage sustainable and ethical practices
- increase the use of sustainable packaging: compostable, recyclable, less plastic (including single use); while ensuring fitness for purpose so that food safety, quality and integrity of the product is not compromised
- use resources-efficient processes, distribution and transport
- minimise waste: Reduce, Reuse, Upcycle, Recycle
- minimise business and supply chain footprints (resources, water, energy, carbon...)
- perform full life cycle analysis of products

This push comes from all directions including society, governments, consumers, investors, the need to be setting objectives towards the United Nations 2030 Sustainable Development Goals, the recent COP 26 and the forthcoming COP 27.

All this makes ECOTROPHELIA more relevant than ever!

ECOTROPHELIA is a fantastic platform and source of eco-innovation and inspiration for the industry capitalising on the creativity and energy of our brightest and most enterprising food students supported by the best academic institutions.



Aparajoy Chakravarty

“We must maintain stable local food reserves as much as possible for a sustainable natural diet”

Aparajoy CHAKRAVARTY, ECOTROPHELIA Denmark representative in the ECOTROPHELIA 2022 jury, has worked as a scientist in new product development for projects all over the world, from Asia-Pacific to the Middle East, Europe, and North America. He has been working for the whole Danish food ecosystem from startups to global companies.

What do you think are the main issues in food innovation today?

Many people and students; when they think about food Innovation get confused between a goal and a process. Food innovation should be more than a goal because it's continuously developing, it's an ongoing process. We need to encourage people in universities and schools, people who are working on this at an elementary level, to see things from a broader perspective.

The world population will increase by two billion in the next thirty years. That means that we will be doubling the amount of protein intake percentage required by the population. This is the key question because protein is quite important for feeding the planet. Food innovation should help us to get answers as long as the earth can fulfill these criteria.

There are several ways of achieving it. One answer that I'm particularly interested in is digitized agriculture. I believe that it could be the key to developing markets. Using more robots and using more technology is the next big step for food innovation. Data analysis and computation would help in simulating and monitoring what might happen in the next ten years down the road, thus providing a better understanding of what is happening in other parts of the world. Using the consumer statistics data and analyzing it would also help us waste less food in production and conception. In the last 10 years, if I may say so, food innovation was limited to the manufacturing aspect: if it is sustainable or not. However, sustainability has now taken the next step. How can you be greener than your competitor? That's the thing that more and more people are looking for. However, the question should be: "you are green, but how do you maintain that?". In Denmark, we have a lot of discussions with researchers, public administrations, startup companies, and students, that are more and more focused on the whole circular economy rather than choosing only one aspect. We need to fulfill the whole circle; we cannot avoid multiple aspects in our vision, even if we need to specialize in one aspect of achieving sustainability as a company.

As for innovative products, do you have any particular expectations?

As I mentioned earlier, I would say alternative proteins. We need to be more creative about maintaining the nutritional diet. A nutritional diet could be animal-based or plant-based. I'm not saying that one is better than the other. We need to have a good balance but I believe the next type of food innovation should be alternative food. For example, one of the student startups had a fermentation project like burgers done with mushrooms. Another example is the development of 100% natural flavors and their use in plant-based diets. That's one of those things which makes me think about how sustainability could be achieved in different ways.

How does the food innovation ecosystem work in Denmark?

Food Innovation in Denmark is deeply rooted in the culture. We have a framework that connects researchers, universities, public administration bodies as well as startups, and the food industry. What best characterizes the Danish culture is collaborative culture: the teams are backed by very good researchers, the students are motivated, and when a university itself lacks resources we always inspire the students to reach out to other people, set in the industry, to acquire feedback. Having good collaboration is something very important.

One other aspect to be noted is that Denmark is one of the countries in Europe with the strictest rules and regulations when it comes to product development. I always advise students to fulfill these rules. Having strict rules and regulations will lead to a good product that would be welcomed in any part of the EU as long as it tastes good and there is a nice sustainability factor. Respecting these rules automatically allows the export of these products throughout the EU. As an example, the National Food Institute, one of the universities, has a close collaboration with the European Food Safety Authority. The students are aware of the most recent changes and trends in regulation. Adding to this that Denmark is very sustainability-oriented, that's a really good combination for food innovation.

How does the food industry view young researchers?

Denmark is very welcoming of new ideas. I was recently giving a lecture in a public forum and was happy to see how startup companies and established companies are looking for new ideas and for inspiration from young researchers. They are very receptive to students and very approachable. You feel welcomed for any questions you might have as a startup firm. There are a lot of consultants and also a lot of student incubators specially designed for food and bio startups. As long as you have an idea supported by a university you can apply to these incubators.

We should also mention more specifically the dairy industry. As you know, Denmark is known for dairy products. They also have their incubators. And something very important to be mentioned here is that even though they are milk-product-based companies, they are welcoming non-dairy ideas as part of their product development initiatives with new startups firms.

Last year, Tempty from Denmark won the gold trophy. Did you expect this award and what happened next to the project?

The moment you know the country you are representing has won and that you see the smiles on students' faces is a wonderful feeling. Right now, I see them all over the place in Denmark. They have gotten more funds from the government to carry on their operations. They have grown from a small lab to a nice production company. Recently they took part in a very important food festival where most of the food industry is represented.

And what are your expectations for student proposals in 2022?

In addition to the wonderful ideas that will be presented, I hope to see that some of the products will take into consideration the changes that have come with the Covid pandemic. During the pandemic, the average person has rediscovered his kitchen. Consumer tendencies have changed. They are no longer afraid to make an effort, as long as they get good products. For example, studies show that during the pandemic, people got used to spending 20 minutes in the kitchen for a meal. I hope that these changes are seen as a driving factor by some of the students. I would be surprised if I discover only on-the-go food projects because lately, consumer behavior is moving in a different direction, especially in plant-based diets.

Another thing I would like to see is a lot of marketing strategies. Two years ago, we were surprised by the lack of marketing insights of some student startups. However last year we could see the top two contenders having a nice strategy on how to enter a market. That's what I'm looking forward to this year as well, perhaps on a bigger scale.

Speaking of the pandemic, from your point of view, what is the impact of recent crises on food innovation?

With the pandemic, the consumer came to understand that we need to maintain what we have. In addition, that applies globally to countries as well. Due to the current war situation, many countries came to realize that they need to preserve their natural food resources like corn, soya bean, wheat, and olive. I believe that each country must think about what it needs to preserve, and about backup plans. Two recent examples come to mind. First, Spain; the production of olive oil is one-third less than expected because of recent drought conditions in the country. That makes me feel like Spain's top priority, going forward, should be to have backup plans in case there is an event like that in the future because of global warming.

The second example is Egypt, which imports its corn from eastern Europe. They never thought that supply chain issues would disrupt their corn imports. There are immense possibilities to learn for every company and its population here. From now on, we must maintain stable local food reserves as much as possible for a sustainable natural diet.



Benet Fité

“At the end of the day, innovation has to satisfy consumer expectations, from the youngest Z generation to the eldest who are increasing life expectancy with special nutritional needs”

Benet FITÉ is a member of the Mahou San Miguel Executive Committee with two main roles, one as QA, R&D, and EP Managing Director; and another one, as New Business Development Managing Director. He is the Spanish representative in the ECOTROPHELIA 2022 Jury

What are your personal expectations regarding food innovation?

My expectations are as follows, food innovation has to give response to the present and future challenges of our current world and particularly of the whole food sector value chain. I'm talking about sustainability from all its three angles: environmental, social and financial, as described by the UN in the 17 Sustainable Development Goals (SDG). As humankind, we are currently facing an era of social and environmental exponential changes:

- increase in world population (food availability, proteins alternatives, food safety, nutritional balance, healthier ingredients, transparency in food traceability...);
- growing impact that our activities have in our environment (CO2 emissions, littering, biodiversity, chemicals and plastics disposal...);
- massive use of resources we do (water, energy, crops, forests...)

At the end of the day, innovation has to satisfy consumer expectations, from the youngest Z generation to the eldest who are increasing life expectancy with special nutritional needs.

How about a quick look at the most important contemporary trends in food innovation regarding to you?

The main trends in the food industry are focused to overcome the challenges described above, so they are covering the whole value chain of the industry: agriculture technology; food production & transformation; logistics & distribution; and restaurant tech. Each of these segments encompasses various sources of innovation and technologies, such as biotechnology, robotics, blockchain, artificial intelligence, machine learning and big data.

Thanks to these technologies, the Foodtech ecosystem will be closer to facing the sustainability challenges presented by the agri-food industry. The use of biotechnology to achieve solutions that guarantee more efficient and sustainable production, as well as the use of artificial intelligence and machine learning to increase efficiency in aspects such as product design and automation. In transformation, the development of new products with novel ingredients and new ingredient sources, such as plant-based, fermentation, and cellular. Finally, the importance of packaging eco-design using new materials and following the 3 R: Reduction, reusable and recyclable.

Could you tell us a little about the food innovation ecosystem in Spain? and more particularly on the place of universities in this ecosystem.

Spain's ecosystem has grown in the last year with the objective of becoming one of the leading food tech nations worldwide. The Spanish ecosystem is the 5th highest for investment in European food tech ecosystems after Germany, the UK, France or Netherlands (Informe Food-tech in Spain, ICEX). This ecosystem includes national, regional, and local government agencies, business associations,

technology centers, science parks, universities, incubators and accelerators, and of course, startups, which are playing an active role in building Spanish food tech. Technology centers in Spain are at the forefront of the development of technologies that bring efficiency to the system, as well as in the discovery of novel ingredients and product development. These agents play a fundamental role in the development of innovation for different companies since they normally work together to carry out day-to-day projects in the companies.

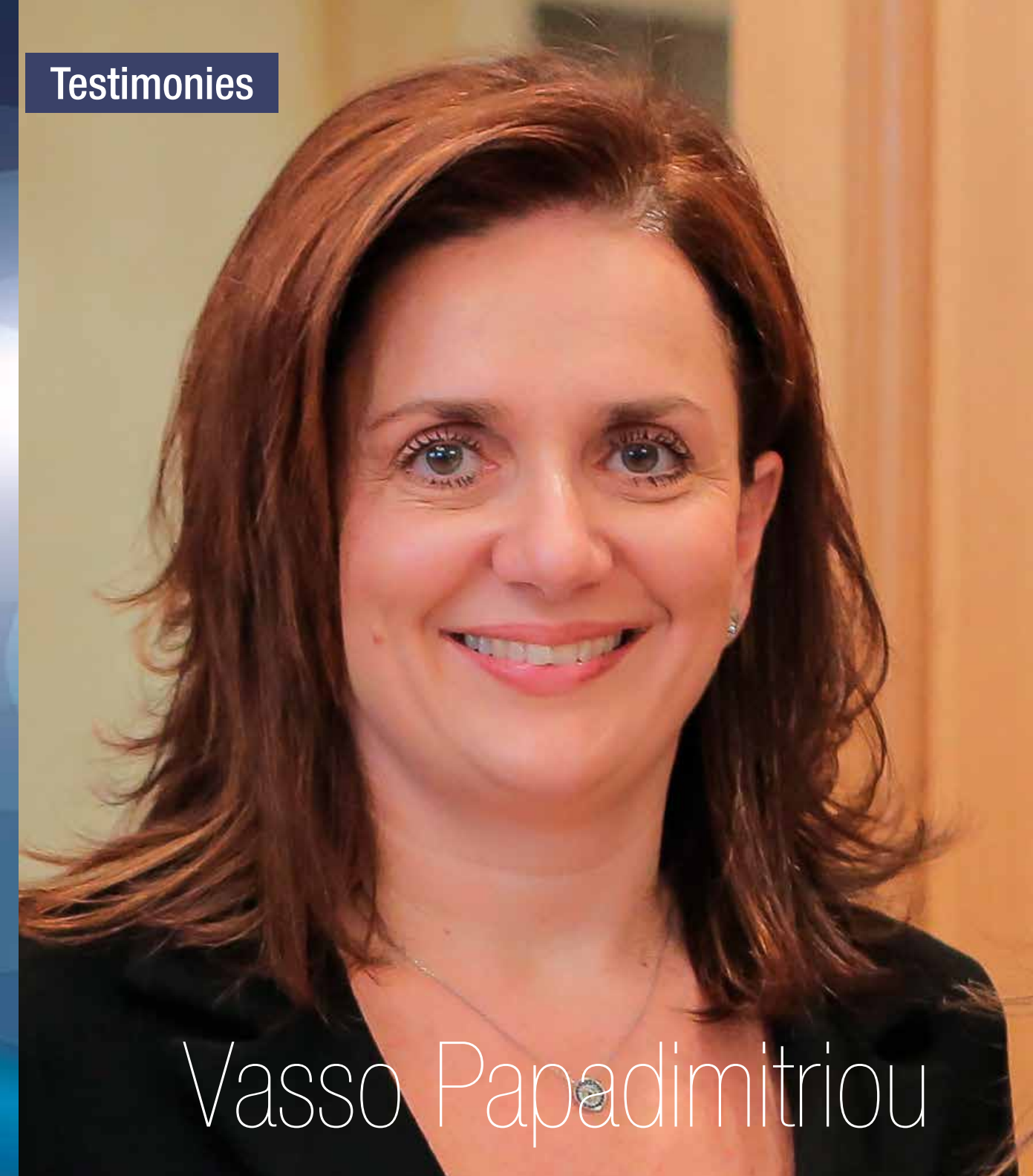
The role of universities and technology parks in the development of startups with a strong technological component is fundamental. The research conducted by these universities is generally carried out in science parks with the technology to scale these solutions. Spain is the ninth highest world power in the production of scientific knowledge in areas such as biotechnology and life sciences.

What are your expectations about the student proposals in 2022? And more generally, would you say that they are up to the professional challenges of food innovation?

My expectations about 2022 proposals are higher than the previous years. In my experience, I've been honored to be representing Spain in ECOTROPHELIA EU for the last 5 years, the level of the students' proposals is getting better and better every year, that's why I'm convinced that in the next edition we will meet really great and innovative solutions to the challenges the food industry is currently facing. I must say that every year universities are more and more focused on finding applied solutions, ready for the market: consumer research, medium-term business case, and sales strategy, together with their scientific and technological knowledge. Probably thanks to the new start-up ecosystems, where all of them are involved, which makes them closer to the needs and reality of the market.

From your point of view, what is the impact of recent crises (covid, war in Ukraine) on food innovation?

In my opinion, the recent crisis has accelerated the focus on global concerns, such as sustainability issues, health and wellness, ingredients and energy scarcity, and costs due to the high inflation rates. Now not only EU regulation with EU Green Deal is pushing all industries to move ahead on these topics, but the consumer is much more sensitive and aware of the importance of these issues. All of this, coupled with increasing inflation, is driving everyone to move food innovation to be even more efficient in the use of resources available as co-products or co-effluents of the food industry. Also, the increase in obesity and the search for wellness around the world are motivating consumers to look for healthier foods and products that are less harmful to the environment. What a great challenge!!



Vasso Papadimitriou

“Innovation leverages entrepreneurship growth, exports, and employment and responds to consumer needs and trends”

Vasso PAPANIMITRIOU, Director General of SEVT, Federation of Hellenic Food Industries and ECOTROPHELIA 2022 jury member , explains the critical need of food innovation for the Food Industry

What is the place of food innovation in the Greek agri-food sector, which is, if I am not mistaken, an important sector for the national economy? What is the place given to sustainability and eco-design issues? And where are the commitments of the National Federation in the innovation field?

The Greek Food & Drink Industry is a driving force of the local economy with enormous scale and impact, in terms of turnover, added value, and employment. It also contributes to the development of more resilient and sustainable food systems, characterized by significant investments, intense extroversion, and innovation. It is worth mentioning that the expenditure of the Greek Food Industry for Research & Development is the highest amongst the EU member states (11% according to Eurostat 2019 data), making the sector competitive and robust, even during volatile times.

SEVT represents the Greek Food & Drink Industry at national, European, and international levels. At the Federation, we believe that innovation is tightly linked with consumer preferences and the sustainable growth of the food sector. Therefore, the actions and the mechanisms promoting research and innovation in the food sector should be a national priority. This is why we emphasize the need to connect research and technological development to the needs of the production sector and we support the development of a national strategy for research and innovation, leveraging business competitiveness and consumer satisfaction.

How about a quick look at the most important contemporary trends or achievements in food innovation in Greece?

I believe that consumer trends are the drivers of the agri-food industry in all countries and therefore it is very important to follow the voice of the consumers. One thing that is certain, is that COVID-19 is leaving behind new trends, consumer preferences, and priorities. The first top trend is an increased focus on health and well-being. Consumers after having more time at home during lockdowns started to focus more on their health, personalized diets, and lifestyles to meet their needs. In this context, they are going to be more trusting in science and in new methods of production for the benefit of the agri-food industry. Also after a year of reduced travel and restrictions, consumers have started to seek new flavors and experiences. In this context, the Food Industry has taken into consideration all these challenges trying to satisfy consumer preferences through innovation aiming at the sustainable growth of the sector.

What are your personal expectations regarding food innovation and what do you expect from the new generations in terms of commitment?

First of all, I would like to mention that Innovation leverages entrepreneurship growth, exports, and employment and responds to consumer needs and trends. The aim of the Greek Food Industry has always been to produce and provide safe and affordable products of high quality. Nowadays, consumer needs and trends are rapidly changing and increasing. Particularly during the pandemic and post-pandemic periods, the demand for value-added, innovative, and sustainable food products has grown.

In order to tackle the challenges raised for circularity, sustainability, and healthy nutrition, the drivers of innovation, digitalization, and investments are critical. In Greece, the food industries are following the changes, investing in all the above-mentioned areas, and trying to meet the new needs of consumers. Food novelty is no more a trend, it is a necessity.

What are the connections between universities, academic research, and industry in the field of food innovation in Greece?

For many years now, SEVT has identified the need to build a strong connection between the Food Industry, Universities, and the Research community. Through the establishment of the Hellenic Technology Platform “Food for Life”, back in 2009, we

have managed to bring together the main stakeholders of the food chain. The vision of the Hellenic Technology Platform “Food for Life” is to achieve effective integration of strategically-focused, intensive research in the field of food and nutrition science as well as consumer insights and food chain management. The aim is to deliver innovative and improved food products and processes for the local, regional and global markets in line with consumer needs and expectations. Such targeted activities would enhance the competitiveness of the Food Industry, based on economic growth, innovation, knowledge transfer, sustainable food production, and consumer confidence.

Ever since, this open collaboration has been constantly developed, ensuring food innovation, but also promoting entrepreneurship and new business opportunities.

And how do you figure out the entrepreneurial spirit among young food professionals in Greece?

As I mentioned before, the Food & Drink Industry is a dynamic and resilient sector with strong activity in Greece and abroad. This is due to the quality of the Greek products and the Greek raw materials, to the continuous improvement of the local Industry, and of course due to our people.

One of the key priorities of the sector is the promotion of Research & Innovation. SEVT wishes to enable entrepreneurship and people development and supports initiatives that link the research & academic community and the future food professionals with the Food & Drink industry.

In this effort, ECOTROPHELIA contest has been a helpful complementary tool, that was embraced with enthusiasm by the Universities, their students, and professors. The competition is an opportunity for young students to develop their creative spirit, their skills in food innovation, to deploy their future food approach and their entrepreneurship mindset. It is also a point of pride for entrepreneurs as they support and encourage the new generation and helps the Food Industry to reveal and retain the new talents that designate the food of our future. It is a place where food science meets food production, where innovative spirit engages with experience. We are committed to continue to support such unique experiences!

Based on your experience, what are your expectations regarding student proposals in 2022? And would you say that they are up to the professional challenges of food innovation?

The Federation of Hellenic Food industries organizes ECOTROPHELIA national contest since 2011. Through the years that I am a member of the jury of the European ECOTROPHELIA competition, I have experienced the progress made and the desire of the students to excel in their innovative spirit and to develop their entrepreneurial skills in a strongly competitive environment. Every year the participating teams are confronted with the real situation and they do it with more passion, more professionalism, and always with great success.

This year, despite the ongoing difficulties, the proposals submitted are of high standards and I am sure that our mission as a jury will be difficult once more!

And what about the consequences of recent crises (covid, war in Ukraine) on food innovation?

Over the last few years the business environment has been quite unstable. The difficult Covid period is now followed by new challenges (climate, energy, and geopolitical crises) that are impacting the food sector all over the world (sufficiency, inflation, shortages in raw materials/energy). Nevertheless, innovation is more than ever a fundamental prerequisite and a vehicle for the transition to more sustainable food systems. Thus, food industries put their efforts towards this direction, focusing on new technologies, research & development, and digitalization, in order to stay sustainable and satisfy consumer trends and needs.



Temptly Food

The winner of the 2021 competition, is already on the marketplace! Martina LOKAJOVA shares with us the story of this startup co-founded with her partners Cecilie Engvand Lund and Ana Pejic.

May you tell us a little about the beginnings of the Temptly Foods adventure?

Our team met in a food innovation course at the Technical University of Denmark in February 2021 which each of us joined with a completely different background but the same ambition. An ambition to work with sustainable and innovative foods to make a positive impact within our food system that needs a change. We quickly matched around the concept of using alternative protein, mycelium, to develop foods of the future. Within 5 days of knowing each other, we applied for an accelerator program and a grant which we won and received. This helped us to move a lot quicker and provided a structured way to reach a minimal viable product.

What happened next is that we won the ECOTROPHELIA national round and later the European round. Winning ECOTROPHELIA was sort of a stamp of validation that allowed us to believe in the feasibility of our project.

The fun part was that the girls and I met during a Covid lockdown and actually had not seen each other in person until about 2 months later. The good news was that when we finally got to meet, we still liked each other.

Today you are already on the market, where are you exactly? How are things going?

Yes, that is correct, consumers and businesses can purchase our product at this point. The journey to the market started in August last year when we registered our company in Denmark which was just before the European round of the ECOTROPHELIA. Then in September, we launched a crowdfunding campaign with the goal to raise awareness among consumers who could pre-purchase TEMPTLY during this campaign. Meanwhile, we also delivered TEMPTLY to smaller catering to get more feedback on our product.

This year, we had our first B2B sales to a canteen and continued raising awareness by participating in different food festivals. Our next step will be to expand our portfolio with new TEMPTLY flavours and launch retail sales. We are aiming to be in stores by the end of the year.

If you had to present TEMPTLY in a few words, what would you be willing to say? And what is the origin of this brand name?

TEMPTLY is a new alternative to products like tofu, tempeh, and meat-based on fungal protein, mycelium. Using mycelium gives our product better texture and low CO2 emissions and since we are not trying to imitate meat, we can focus on creating products that taste great in their own way and have good nutritional value. At the very beginning of the project, we considered creating a tempeh-like product and wanted to combine the word tempeh with the word tempting. However, even though the final product, TEMPTLY, has moved on and is no longer tempeh-based, we felt it was appropriate to keep the word TEMPTLY because it is catchy and speaks to everyone.

How did the transition from a student project to a professional project work out for you? How did you manage to do things so quickly?

The transition for us was actually quite brief and smooth because while we were still studying we started to work pretty much full-time on Temptly Foods. We registered the company when we were still students and once we graduated, we could finally start focusing only on the company instead of handling studies on the side as well. Being full-time in our company after graduating was possible because we raised over 300,000 Euros by now in funding while half of it was through soft funding. The second part of the funding is a convertible note that we received in an accelerator program called GreenUP.

What is your target market? And do you expect to grow in the European market?

In Temptly Foods, we believe that it should be simple to eat sustainably, and we aim to empower everyone to eat better for themselves and for the planet. Our initial target market is people who are trying to reduce or avoid meat due to their health or environmental impact.

In terms of geography, we are starting with the Nordic countries, specifically Denmark, because that's where we are based and that's where we understand the consumers the most. There are many cultural similarities between the Nordic countries: The way the people eat, the GDP, and prices in the same range. We surely plan to expand beyond other Nordic countries but that will be the next step.

What does the concept of food innovation mean to you personally or for the company?

To me, food innovation means creating food products that help us accelerate the transition toward a sustainable food system that can accommodate the needs of the future population.

I believe that agriculture, as it is today, is not going to last, especially due to the impact of climate change and changing weather conditions. That is why we need to innovate and create innovative food products that will help to feed the future population.

At Temptly Foods, we strongly believe that we can contribute to the future food system, starting with introducing new alternative protein sources into people's diets.

And my last question: In the end, what would you say the competition and the award did for you?

I can definitely say that if it wasn't for the development of innovative future foods course connected to ECOTROPHELIA, I think this project wouldn't have happened. Winning ECOTROPHELIA was a great validation for our case which opened many new doors and allowed us to make new connections.



BUTTERNOT

Lise AUBRY, one of the three co-founders of Butternot, who represented France at ECOTROPHELIA Europe 2021 competition and co-won the silver trophy, talks about the origin of the project, which was conceived and developed at ENSAIA-UL Nancy in partnership with ENSAD and FMA-UHA.



Butternot was the great surprise of last year in ECOTROPHELIA. You won the gold national award, the fruit and vegetables innovation award, the public's favorite and the silver ECOTROPHELIA Europe. What is your conclusion from all this?

Without ECOTROPHELIA we would not have started this adventure. It took us about six months of commitment to design, develop and offer a unique and innovative product that has indeed captured the attention of many professionals. The competition was a unique opportunity to consider a product from A to Z, not only in terms of execution but also in terms of design and management.

How far have you got with this project?

The main challenge was to move from a student project to an entrepreneurial one. We decided with Cleo Croze and Anna Ginzburg to continue the adventure as a trio, to go from an ECOTROPHELIA project to a startup program with the support of the Lorraine Incubator and the backing of Peel (Pole Entrepreneurial Etudiant de Lorraine). We were also privileged to have nine months of support from INCO Group's Prevent2Care Lab.

We are continuing R&D on the product in order to improve it, as well as we are finalizing our business model. We also maintain our research ties with our school, ENSAIA, from which we graduated last year, for all the work on the microbiological aspects.

And if we talk a little about Butternot, this product really seems to be a revolutionary innovation...

Butternot is a vegetable alternative to butter and margarine, naturally fat-free. It is produced with 80% vegetables, and 100% French products, and all the ingredients are 100% natural. Butternot is perfect for spreading on a slice of bread or incorporating into salted or sweet cake batter, cookies, pancakes, etc. Our desire to keep the product fat-free prevents us from having the non-stick property, which does not make Butternot an alternative as a cooking product.

And how do you see your first steps in the market soon?

We have decided to reconsider our strategy in choosing our first distribution channel. At the time of the competition, we had planned to project ourselves immediately in a BtoC model, but today it seems more relevant to us to start our business activity in BtoB at first.

We would like to work with Food-Away-From-Home (FAFH) establishments, as university and school canteens and we also intend to develop partnerships with bakeries. This is a set of partners who will help us to ensure volumes as well as provide us with feedback to improve our product. This will allow us to perfect our product and prepare its launch in large and medium-sized retailers in a second step.

Testimonies



NUTRI salad bars

Anna CHRISTODOULOU shares with us the adventure that led the NUTRI salad bars project to the ECOTROPHELIA Europe silver trophy in 2021. The product was developed in the Laboratory of Food Chemistry and Technology, of the School of Chemical Engineering of NTUA, with her teammates Sophia Stathi, Christophoros Vasileiou, and Thaleia Vintzilaïou.

Could you tell us how you came to participate in ECOTROPHELIA?

During my chemical engineering studies, I had the chance to take a food design course. This course had a partnership with ECOTROPHELIA Greece. A great opportunity that my teammates and I wanted to seize. We brainstormed together with our supervisors to find the most unique, innovative, and sustainable idea. And the result was that we participated and won the national round and even the silver trophy at the European competition.

How about a brief presentation of NUTRI salad bars?

NUTRI salad bars are eco-friendly savoury cereal bars. We launched them in three different flavors: The Greek salad bars based on the famous Greek Salad with tomato, olive, and feta cheese; the green salad bars with spinach, rocket, and, nuts, and the legumes salad bars with various vegetables. Our main concern was also to use fresh ingredients in a shelf-stable product while maintaining the characteristics of a fresh product like a fresh tomato. And regarding our ingredients, we incorporate adding value to side products of the agrifood sector of high nutritional value.

What's the target market of your product? And what will be the price of NUTRI salad bars?

A cereal bar is a very convenient product that everyone can carry everywhere, for example to work or to university. Our product is almost for everybody; especially for people who love Mediterranean and Greek diets or for people who are trying to follow a healthier diet. As for the price, it will be around 30 cents per bar.

Where are you with this project? What are your prospects for making the product really in the market?

Currently, we have an ongoing project with a leading food industry company in Greece, Papadopoulos S.A, to bring our product to the market. We hope that we will get there in a short time. Many steps and obstacles were already overcome. We are now working in order to make the product suitable for the industry.

What was the impact of your participation in ECOTROPHELIA and of your awards?

With ECOTROPHELIA we had the privilege to design and develop a real product. This allowed us to get closer to the reality of being professional engineers. It helped us also to develop some skills like communication skills. Regarding the award, this is what allowed us to get the interest of the food industry; that's why this project is going on now.

How do you see the transition between a student and a professional product?

In a word, I would say that the number of parameters to be taken into account, when designing for a real market, is much more important. Nothing can be overlooked. Whether it's the financial aspects, the marketing aspects or the production issues. It's certainly a much more complex process than a student project, but we're doing it.



The ECOTROPHELIA EUROPE 2022 jury

PRESIDENT OF THE 2022 JUDGING PANEL

Mr Bertrand Emond

Head of Membership & Training - Campden BRI UK

OFFICIAL REPRESENTATIVES

Ms Fabiola Dionisi

PhD, Academic Alliances and
Expertise Development - Nestlé

Mr Maarten Van Der Kamp

Director of education – EIT FOOD

Dr Daniel Rossi

Chairman R&I WP - Copa-Cogeca

Research & Innovation Delegate – CONFAGRICOLTURA

Ms Audrey Ashworth

SIAL Director

14 NATIONAL OFFICIAL REPRESENTATIVES

BELGIUM

Mr Anthony Bernard

R&D Engineer – Andros

CROATIA

Prof Draženka Komes

Full Professor - CroFost/Faculty of Food
Technology and Biotechnology, University
of Zagreb

DENMARK

Mr Aparajoy Chakravarty

Scientist - AGC Biologics

FRANCE

Mr Antoine Baule

Innovation administrator - ANIA

GERMANY

Ms Christin Haupt

Director Research & Development - The
Lorenz Bahlsen Snack-World GmbH &
Co. KG Germany

GREECE

Ms Vasso Papadimitriou

General Director - Federation of Hellenic
Food Industries (SEVT)

ICELAND

Mr Gunnar Sigurdarson

Key Account Manager – Manufacturing
Industries – The Federation of Icelandic
Industries

ITALY

Mr Guglielmo Gennaro Auricchio

Export manager for EU area and head of
sustainability – AURICCHIO SPA

PORTUGAL

Dr Timothy Hogg

Reader in Food Science and Technology -
ESB-UCP

SERBIA

Prof Ana Kalušević

Senior Lecturer - Academy of Applied
Studies Belgrade

SLOVENIA

Dr Tatjana Zagorc

Director - Chamber of Commerce and
Industry of Slovenia - Chamber of
Agricultural and Food Enterprises

SPAIN

Mr Benet Fité

Quality, RDI & Environment Manager –
MAHOU SAN MIGUEL

THE NETHERLANDS

Mr Kees De Gooijer

CEO - TKI Agri&FOOD

UNITED KINGDOM

Mr Chris Gilbert-Wood

Director - CGW Food Tech

15 Countries in 2022



FRANCE
Sauces Papillon
Sauce & gravy

The first brand making fresh sauces changing throughout the year with seasonable vegetables.

Institut Agro Montpellier



ITALY
MALRUBÀ
Biscuit & cake, Bread and pastry

"Malrubà", a biscuit dedicated to those who want to enjoy a delicious and healthy moment!!

ITS Agroalimentare Piemonte



SPAIN
Torreznos Vegguiss
Meat product, Ready-cooked meal

Snack made from texturized pea protein, which is subjected to various treatments.

Campus La Yutera, TecnoCampus Mataró-Maresme



BELGIUM
WheyMore
Breakfast

WheyMore is a vegetarian sandwich spread, dip or sauce. It's sustainable and counters food waste.

Thomas More University College



GERMANY
Golden Barley
Breakfast, Drink

Barley-based milk alternative made from brewer's spent grain.

Technische Universität Berlin



PORTUGAL
Handy Rice
Breakfast, Dessert, Nutraceutical

Handy Rice is a sweet dehydrated snack, made of brown rice and yacon, a source of fiber.

University of Aveiro, University of Coimbra



THE NETHERLANDS
Totally Nuts
Side dish

Totally Nuts is the first plant-based "feta" alternative that is made from upcycled almonds.

Maastricht University



CROATIA
Pumpkina
Breakfast, Dessert, Ready-cooked meal

Fermented buckwheat based product with the addition of pumpkin and granola.

Faculty of Food Technology and Biotechnology, University of Zagreb



GREECE
Granny's Wish
Drink

"Granny's Wish" is a highly nutritious shot made solely of legumes and vegetables with double use.

Agricultural University of Athens



SLOVENIA
WiBuBa bar
Biscuit & cake, Nutraceutical

WiBuBa bars - nutritional support for conception, pregnancy and breastfeeding from natural sources.

Biotechnical faculty, University of Ljubljana



UNITED KINGDOM
Crack(er)ed it
Biscuit & cake, Bread and pastry

Fruit and oat crackers, made using strawberries, raspberries and blackberries with herbs and spices.

University of Nottingham



DENMARK
Crrunchies
Biscuit & cake, Ready-cooked meal

Crrunchies fava crackers, a tasty and sustainable to-go snack that supports kids' nutrition.

Technical University of Denmark, National Institute for Food



ICELAND
Volcanic Shepherd's Pie
Ready-cooked meal, Sauce & gravy, Side dish

A vegetarian shepherd's pie ready meal with a side of mushroom gravy.

University of Iceland



SERBIA
Beetsuits
Biscuit & cake, Bread and pastry

Extruded organic snack product made of gluten-free wholegrain cereals, beetroot pomace and ginger.

Academy of Applied Studies Belgrade



PANGEA TEAM
REFRESH
Drink

"REFRESH" is a beverage made from tiger nuts, spirulina, peppermint, and orange peel alginate bubble.

AgroParisTech, Institut Agro Montpellier, Universitat Polytechnica de Valencia, University of Ljubljana, Agricultural University of Athens, University of Natural Resources and Life Sciences of Vienna

15 COMPETING COUNTRIES

 BELGIUM

THOMAS
MORE

WHEYMORE

WheyMore is a vegetarian sandwich spread, dip or sauce. It's sustainable and counters food waste.

Vegetarians encounter a lot of problems while searching for products with the necessary quantity of fibers and nutrition. Wheyste wants to solve this. With the creation of WheyMore Wheyste offers a sustainable product that can be used as a spread, sauce or dip. We created two basic recipes by using whey. Whey is a product declared as waste by the cheese making industry although it contains a lot of proteins. It comes from the rennet from thistles. Together with whey our two basic recipes are made with seasonal ingredients and therefore each one is only available during a certain time of year. Besides the two basic recipes we created a third one, greenverse, using whey and ingredients from our own waste streams. Most spreads contain mayonnaise while WheyMore does not. This increases our nutritious and healthy character. Creating these vegetarian products led to a sustainable product where people, planet and profit are balanced. All thanks to using locally grown ingredients, wastestreams and recycled products. Wheyste hopes that their processes and ways of working can also convince non vegetarians to choose their sustainable option.

Team Members

Kaat Sysmans
Kelsey Souwens
Marthe Derriks
Robin Vanwiddingen

University

Thomas More University College
<https://www.thomasmore.edu/>

Contact Person

Prof Lotte Vertommen, Professor



Fevia

FEDERATION

Federation of the Belgian Food Industry – FEVIA

The food industry is Belgium's leading industrial sector. Food companies account for a significant proportion of industrial activity, creating direct and indirect employment for hundreds of thousands of people. As the Belgian food industry federation, Fevia aims to promote the sustainable development of the sector by cooperating with all stakeholders. Its membership includes large companies and SMEs; local, small-scale producers and companies engaged in mass-production based on leading-edge technology. Fevia also cooperates with 26 associations each of which represents a specific sector of the food industry.

With Food.be – Small country. Great food.

Great food, the sector highlights the quality, diversity and innovation of Belgian food across the world.

<https://www.fevia.be>

Contact Person

Mr Bart Buysse, CEO
Mrs Melissa Augello, Event Specialist



PUMPKINA

Fermented buckwheat product with pumpkin cream and granola.

A jar full of life, in short, is the best way to present our innovative and playful Pumpkina. Pumpkina is the first flavoured, fermented buckwheat product, and it's made with only the best quality ingredients of Croatian origin. The humble star ingredient is a Croatian variety of buckwheat which has been transformed into a refreshing drink using special and very hard-working fermentative cultures. The buckwheat base is accompanied by a vibrant, sweet and nutritious pumpkin creme with apricots and honey. Our toasty, nutty granola adds a perfect crunch, as well as healthy fibre and fats, to Pumpkina. The process of making Pumpkina is straightforward, but not a simple one... We start it by making a thickened buckwheat drink, in which we add the special fermentative and protective cultures, leaving them to work. But while they work, so do we. We bake, and combine, and blend, and finally get a sweet pumpkin cream to be mixed into the fermented buckwheat. Once assured every batch is perfect, the lid is closed. An individual packaging of carob flavoured granola is hidden under the colourful packaging, almost like a present, waiting to be discovered and enjoyed.

GRAINE



Hrvatsko Društvo Prehrambenih
Tehnologa, Biotehnologa i Nutricionista
(HDPBN)

FEDERATION

**Croatian Association of Food Technologist,
Biotechnologist and Nutritionists at Faculty
of Food Technology and Biotechnology,
University of Zagreb, Zagreb, Croatia
HDPBN/ CROFOST**

The Croatian Association of Food Technologists, Biotechnologists and Nutritionists has the main goal of linking Bachelors and Masters of Food Technology, Biotechnology and Nutrition Science at the Faculty of Food Technology and Biotechnology, University of Zagreb to develop, promote and preserve the dignity of the profession and advocate it's interests. The Association's Programme is primarily focused on employment possibilities; their influence on legal regulations; linking to related associations and non-government organisations internationally; popularising of profession through media and publishing the Croatian Journal of Food Technology, Biotechnology and Nutrition. Every year, the Association is organizing several events, like national ECOTROPHELIA competition and national professional meeting Functional Food in Croatia. Every second year, the Association is involved in the organization of International Congress of Food Technologists, Biotechnologists & Nutritionists.

<http://pbn.pbf.hr/index.php/kontakt/>

Contact Person

Dr Mario Ščetar, PhD, Associate Professor
Dr Draženka Komes, PhD, Full professor

Team Members

Din Mušović
Dora Brdar
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Larisa Šmitran
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Contact Person

Prof. Draženka Komes, Full professor



CRRRUNCHIES

Crrrunchies fava crackers, a tasty and sustainable to-go snack that supports kids' nutrition.

Team Members

Martha Gottlieb
Savino Strippoli
Suellen Ferro

University

Technical University of Denmark,
National Institute for Food
<https://www.food.dtu.dk/english>

Contact Person

Prof Timothy Hobley, Associate
Professor



Worldwide, people are getting busier with their daily chores, thus preferring easy and fast solutions regarding their day-to-day food intake. Consequently, increasing demand for kids' snacks has followed.

Crrrunchies crackers are a nutritious to-go snack for children above three years old, a solution for overwhelmed parents and cranky kids. In addition, it supports the trend of food convenience and the kids market's need for healthy food items.

Consequently, parents would be able to teach their kids to eat responsibly by choosing healthier and more sustainable food options.

The product consists of crispy crackers based on fava beans, an ingredient rich in protein, fibers, and Vitamin B3. It provides a high energy intake due to the number of carbohydrates, essential for children's development. Furthermore, Crrrunchies corresponds with the official diet advice in Denmark, which recommends legumes as snacks for kids due to the satiety from a high content of dietary fibers and protein. Moreover, child-friendly and favorable packaging is provided.

Finally, the key ingredient (fava beans) is not yet widely used in northern countries, such as Denmark, but the plant is easy to grow and is predicted to be a rapidly growing market potential.



FEDERATION

National Institute for Food - DTU-Food

The National Food Institute researches and communicates sustainable and value-adding solutions in the areas of food and health for the benefit of society and industry. The institute's tasks are carried out in a unique interdisciplinary cooperation between the disciplines of nutrition, chemistry, toxicology, microbiology, epidemiology and technology. The vision is that the National Food Institute creates welfare for the future through research into food and health. The institute makes a difference by producing knowledge and technical solutions which: prevent disease and promote health, make it possible to feed the growing population, develop a sustainable food production.

<https://www.food.dtu.dk>

Contact Person

Dr Christine Nellesmann, Institute Director
Dr Timothy Hobley, Associate Professor

SAUCES PAPILLON

The first brand making fresh sauces changing throughout the year with seasonable vegetables.

Team Members

Margot Neveu
Mathis Pellerin

University

Institut Agro Montpellier
<https://www.institut-agro-montpellier.fr/>

Contact Person

Bernard Cuq, Professor-Researcher
Catherine Humeau, Professor - Researcher



Papillon Foods is offering you an alternative to ultra-processed tomato sauces that you can find in any supermarket. Our proposition is simple: home-made seasonal sauces in the fresh food section. Our aim is to offer sauces without heating treatments, kept fresh via vacuum packing. This way, all the vitamins remain in the vegetables as well as flavours. By offering more tasteful and more nutritious sauces, we encourage consumers to increase their fibres and vitamins intakes for a healthier diet.

Not only our sauces are better for you, but they are also more eco-friendly because they are made with local organic, downgraded and seasonal vegetables. By promoting local food networks, we limit the extra charge of transports and intermediaries which allow us to better pay farmers. Finally, our packaging are plastic free and indefinitely recyclable!



FEDERATION

Association Nationale des Industries Alimentaires - ANIA

ANIA is the association representing the French Food Industry. First industrial sector in France with a turnover of 195 billion Euros in 2021, the food industry is considered as a flagship of our country in the world. The 16,647 food companies (of which more than 98% are SMEs) employ almost 429,079 workers (first industrial employer in France). ANIA represents 30 sub-sectors of the Food industry: processed meat products, dairies, soft drinks, ready to eat meals, snacks, canned foods... Its mission is to promote the competitiveness of the food sector. This is why ANIA's staff is dealing with all key issues for food companies: i.e. Food quality and safety, economic issues, sustainability and innovation... The last two items are the reason why ECOTROPHELIA is seen as a real opportunity by French food companies.

<https://www.ania.net/>

Contact Person

Mrs Françoise Gorga, R&I Director

15 COMPETING COUNTRIES



GERMANY



GOLDEN BARLEY

Barley-based milk alternative made from brewer's spent grain.

Golden Barley – a new and trendy addition to a dairy-free lifestyle!

Whether in the morning cappuccino or in cereals: plant-based dairy-free alternatives are now trending, and not only among vegans. Plant milk is now no longer a niche product!

Besides oat, almond and soy bean, a milk alternative made from barley is still missing from the supermarket shelf.

It's Golden Barley – that fills the gap in the market. By using upcycled barley grain we were able to create a delicious and nutritious drink. Golden Barley is enriched with calcium and vitamins B12 and D2 and is a low-carb, lactose-free source of protein and fibre. With this wholefood you are not only doing something good for your healthy lifestyle, you are also contributing to better sustainability. In fact Golden Barley is the most eco-friendly milk alternative.

The barley that forms the basis for our plant milk is obtained from spent grain, a by-product of beer production.

Every year, millions of tonnes of spent grain go to waste. Although spent grain can be turned into a high-quality food ingredient, most of it is used to feed livestock or ends up in landfills. Mainly the sugar is used in the brewing process. Which means that the grain itself remains unaffected, while plenty of fibre, protein and vitamins are left unused. With a focus on a sustainable future, we take full advantage of this hidden potential of spent grains. Join us in our mission and avoid food waste together - all just by enjoying Golden Barley!

Team Members

Laura Caspereit
Thao Tran

University

Technische Universität Berlin
<https://www.foodtech.tu-berlin.de/menue/home/>

Contact Person

Mrs. Cornelia Rauh, Chair of Food Biotechnology
and Food Process Engineering



FEDERATION

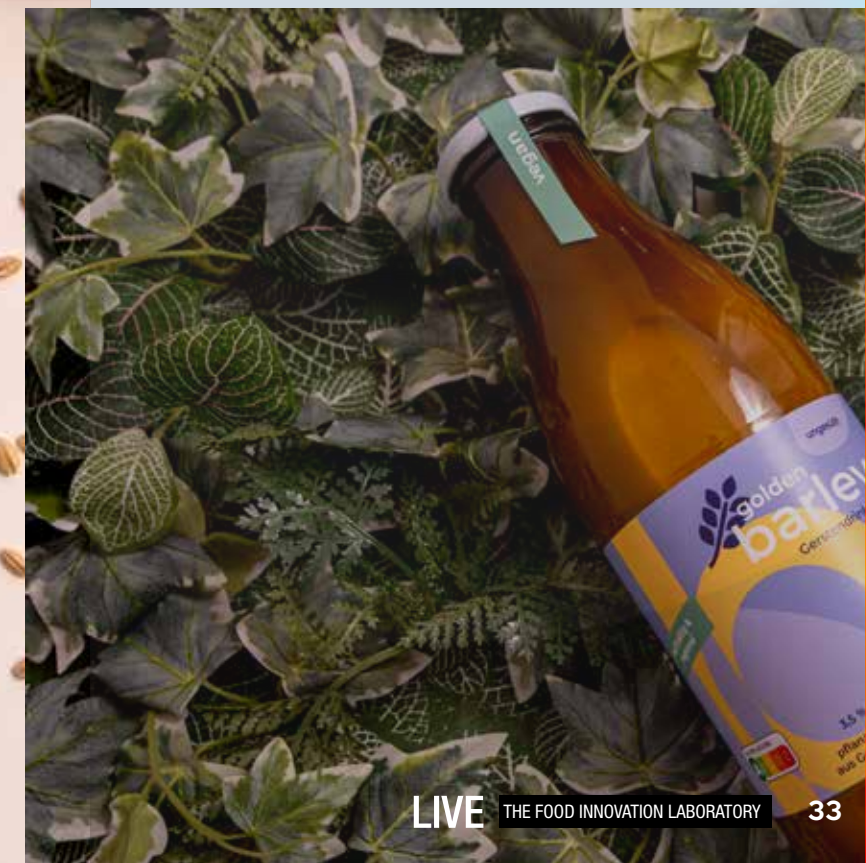
Research Association of the German Food Industry - FEI

The Research Association of the German Food Industry (FEI) is a non-profit, registered association supporting research projects in all fields of food science, food technology and nutritional science. Up today the FEI is the sole research association spanning almost all branches and disciplines of the food and drink industry in Germany. The FEI connects economy and science: it coordinates yearly about 100 cooperative research projects, organises scientific conferences and publishes different media for experts. Since 2010 the FEI organises the TROPHELIA competition in Germany to find the best team for ECOTROPHELIA EUROPE: Altogether 175 teams from 22 universities took part in this national competition.

<https://www.fei-bonn.de/>

Contact Person

Dr Volker Häusser, Managing Director
Mrs Susanne Stark, PR Manager



15 COMPETING COUNTRIES

 GREECE



GRANNY'S WISH

"Granny's Wish" is a highly nutritious shot made solely of legumes and vegetables with double use.

Team Members

Argyris Fratzeskakis
Eirini Kallianioti
Eleni Renta
Evangelia Spertou
Marina-Danai Lytra
Vasiliki Karanika

University

Agricultural University of Athens
<http://fst.aua.gr/en>

Contact Person

Mrs Marianna Arvaniti, PhD Candidate
Mrs Markella Tsigkrimani, PhD Candidate

Granny's Wish is a plant-based high protein Ready-To-Drink shot, that consists solely of vegetables and legumes. Its two unique flavours, based on red lentils and chickpeas, will make legumes your new favorite eating habit. Not only is it full of protein and fiber, but it is also free of salt and sugar, making it a great ally to your health. Granny's Wish is a shot that retains the freshness of vegetables and the mouthfeel of legumes. It is an ideal alternative to conventional protein snacks, which will keep you going during a busy day at work or after a demanding training session. Its dual nature, which is based on its high density, makes it also a perfect choice as salad dressing or any other meal. Its eco-friendly character is based on the combination of the limited number of plant-based raw materials, their low environmental footprint and low production of food waste. "Granny's Wish", the all-natural, healthy, nutritious alternative to high-protein snacks re-introducing legumes in your daily diet. Suitable for everyone at every hour of the day.

And don't forget Granny's Wish "Drink your strength!".



FEDERATION

Federation of Hellenic Food Industries - SEVT

SEVT represents the Greek Food & Drink Industry, which is a dynamic, competitive and extrovert sector that plays a significant role in the Greek economy. Its members are Branch Associations and individual food companies. The mission of SEVT is to facilitate the development of an enabling business environment where all food and drink companies, can operate responsibly in order to respond to the increasing needs of both consumers and society, by offering products of high quality, safe and environmentally friendly. Committed to the leverage of business competitiveness, SEVT works to link research and innovation with the needs of the production sector and supports initiatives, such as ECOTROPHELIA contest, which bring together young generation, researchers and professionals of the food sector and promote the innovative ideas for the Food Industry.

<https://www.sevt.gr>

Contact Person

Mrs Vasso Papadimitriou, Director General
Ms Sofia Savopoulou, Communications Manager



15 COMPETING COUNTRIES



ICELAND



HÁSKÓLI ÍSLANDS

VOLCANIC SHEPHERD'S PIE

A vegetarian shepherd's pie ready meal with a side of mushroom gravy.

Team Members

Kayla Thorbjornsson
Zaw Myo Win

University

University of Iceland
<https://www.hi.is>

Contact Person

Prof Ólafur Ógmundarson, Professor
Prof María Guðjónsdóttir, Professor



FEDERATION

Federation of Iceland Industries

The Federation of Icelandic Industries was founded in the year 1993. It is the largest employers' organisation in Iceland, has nearly 1,400 member companies who are very different in terms of size and field of activity. Among industries represented are construction, manufacturing, food industry, power intensive industries, high-tech and creative industries.

<https://www.si.is>

A vegetarian shepherd's pie with a side of mushroom gravy. The pie consists of a lentil and vegetable filling topped with a layer of mashed potatoes. It comes as a refrigerated ready-meal that requires 10-15 minutes of heating in the oven, but can also be frozen. We plan to use ugly vegetables to combat food waste in the production phase of agriculture. Additionally, we use the entire potato including the peel to combat food waste, add extra nutrition, and contribute to the texture. The pie will be sold in an aluminium container that can be placed directly in the oven, then recycled or reused. We aimed to limit packaging to the least amount of materials. The label will be made from a sustainable paper material. We see opportunity to innovate with the gravy packaging such as having an edible and dissolvable film that would melt into the pie as it warms like lava spilling out of the potatoes.

Our company Betri Matur aims to create ready-meals that are nutritious and healthy, thus saving people time without compromising their health. Additionally, we are encouraging meat-free eating, but with a savory taste. Betri Matur, translating to Better Food, is a family oriented revolutionary vegetarian food company. We are proud of what we stand for as a company: Better food, better life, better health.

Contact Person

Mr Sigurdur Hannesson, Managing Director
Mr Gunnar Sigurdarson, Key Account Manager - Key Account Manager-
Manufacturing Industries



Team Members

Cesare Vanni
 Christian Molineris
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 Francesca La Riccia
 Mattia D'Amico
 Riccardo Ferrera
 Riccardo Timossi

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ITS Agroalimentare Piemonte
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Contact Person

Mr Franco Tesio, Professor
 Ms Martina Alfieri, Coordinator



MALRUBÀ

“Malrubà”, a biscuit dedicated to those who want to enjoy a delicious and healthy moment!!



MALRUBÀ is a delicious cookie that will surprise you with its unique taste, as unique is the combination of its ingredients: hemp, beans and carob. The stages of its processing are studied and carried out with respect for workers and the environment. The product was born from the idea of wanting to propose a snack that had simple, virtuous and sustainable ingredients, with high nutritional properties and typical Italian geography. Thus MALRUBÀ was born, a cookie of delicate shortbread dough with hemp flour, which contains a soft cream of cannellini beans enriched by carob pulp that enhances its taste and aroma. Hemp absorbs more carbon dioxide per hectare than any other crop and can be grown even on poor soils. It represents a faster and more cost-effective carbon conversion solution, contributing to the reduction of environmental impact. Carob is a hardy plant adaptable to any type of soil; it tolerates periods of prolonged drought. It requires reduced fertilization and requires less machinery, resulting in reduced emissions and phytosanitary interventions. The bean absorbs and transfers atmospheric nitrogen to the soil, reducing fertilizer use. It is a mainstay crop of sustainable agriculture. Used in the vegan diet, it responds to protein deficiencies in this type of nutrition. It is a good answer because of its high protein content, achieved with reduced environmental impact. The amount of protein contained in 100g of beans is about 22g.



FEDERATION

Federalimentare - Food & Drink Industry Federation

Federalimentare represents, protects and promotes the Italian Food and Beverages Industry, the second-highest ranking Italian manufacturing sector. The Italian trade Associations for each food and drink sector are grouped together under Federalimentare, which represents more than 7,000 companies with more than 9 employees each, located throughout Italy. Committed to working alongside the authorities in promoting a food model based on safety and quality requisites, the Federation is also aware of the needs of food companies, thus promoting collective economic and social growth. It supports research and innovation, in keeping with tradition, by responding to market developments and new consumer needs. Federalimentare is proud to represent Italian leading economic actor, and is conscious of being the bridge between the Food Supply Chain and European Union.

<http://www.federalimentare.it>

Contact Person

Mr Ivano Vacondio, Legal representative
 Ms Giorgia Sabbatini, Promotion, events & EU Project Department



HANDY RICE

Handy Rice is a sweet dehydrated snack, made of brown rice and yacon, a source of fiber.

Team Members

Bruna Antunes
Patrícia Godinho
Rafaela Vieira

Universities

University of Aveiro
<https://www.ua.pt/>

University of Coimbra
<https://www.uc.pt/>

Contact Person

Prof Manuel Coimbra, Associate Professor with Aggregation
Prof Cláudia Albino, Assistant professor

Handy Rice is a thin crunchy snack, source of fiber, made from Carolino brown rice, a typical Portuguese rice variety, and a smooth exotic sweet flavor promoted by yacon, a tuberous root originally from Andes, efficiently cropped in Portugal. The sweet taste of Handy Rice snack is provided by non-glycemic carbohydrates, such as fructose and fructooligosaccharides, empowered by the presence of inulin as dietary fiber. Inspired by Portuguese culture, Handy Rice has the taste of traditional rice pudding (“arroz doce”) by combining national products with the familiar taste of cinnamon. As a topping it presents almonds caramelized with yacon syrup, boosting the snack crunchiness. Handy Rice is also available in red fruits and apple crumble recipes. These formulations promote shorter commercialization and consumption circuits and can be easily adapted to characteristic recipes of other countries resulting in new snack flavors.

To produce Handy Rice snacks, the brown rice is cooked with the other ingredients, crushed, spread in small pieces and covered with the different caramelized toppings. The product is dehydrated, packed, and distributed for sale at €0.99/20g package. It is stored without refrigeration, with a minimum shelf life of 1 month. It's easy to carry and ideal for daily life, providing only 4% of the recommended daily energy. The packaging includes a transparent window made of an innovative biodegradable starch-based film produced from rice subsidiary products.



FEDERATION

Associação Integralar - Intervenção de Excelência no sector agroalimentar – PortugalFoods

As a national cluster for the agrifood sector, PortugalFoods aims to promote the development and competitiveness of food companies, through the increase of their technological index and the promotion of their internationalization. PortugalFoods is a private non-profit association that brings together more than 170 members, including food industry companies, entities from the national scientific system (universities & institutes) and other members whose activity is related with the agrifood sector.

By empowering food companies and connecting partners, PortugalFoods is a platform where its members establish win-win relationships with the final goal of producing and sharing knowledge to support innovation, competitiveness and internationalization.

<https://www.portugalfoods.org/en/>

Contact Person

Ms Deolinda Silva, Executive Director
Ms Fabiana Oliveira, Project Manager at Knowledge Division





BEETSCUITS

Extruded organic snack product made of gluten-free wholegrain cereals, beetroot pomace and ginger.

The Beetscuits is organic product created by extruding gluten-free grains with the addition of beetroot pomace and ginger. This product has a simple, but nutritionally rich composition, with high fiber and low fat contents. Due to its properties, it is intended for different target groups.

Do you manage to balance a fast-paced lifestyle with a balanced diet? Do you manage to keep up with all the new scientific findings and adapt your diet to them? Would you like to have a quick, healthy, universal and affordable meal? If you answered « Yes » to any of these questions, then Beetscuits is what you need!

The path to the creation of Beetscuits begins on grain plantations spread throughout Serbia; we select the highest quality corn and buckwheat grains, so that the best that Serbia can offer reaches your table. The road further leads us to beetroot and ginger plantations, where the organic fruits are harvested with the greatest care, from which the finest juice is obtained, while the pomace from the production is left for drying and further processing. With the help of extruding technology, the processing of grains under high pressure, we get organic snack bars adapted to the diet of a large number of people - rich in fibers, vegan, with no added colors and flavors, with no added salt and sugar, and allergen free. Those eco-innovative crunchy neutral-tasting snack bars can be eaten on their own, with dip or spread, milk or beer. Beetscuits are un-beet-able!

Team Members

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University

Academy of Applied Studies Belgrade
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Contact Person

Dr Ana Kalušević, Professor



FEDERATION

Serbian Association of Food Technologists – SAFT

The Serbian Association of Food Technologists (SAFT) is organization of food professionals established in 2009 in Belgrade. The SAFT mission is to create and maintain a strong link and interconnection between research institutions and food companies, researchers and food professionals, and to support and promote enabling environment for innovations in the food sector. SAFT was the organizer or co-organizer of several important international and national food related events in Serbia, such as the 4th European Workshop on Food Engineering and Technology, 6th CEFood Congress, International FoodTech Congresses, national competitions for the best PhD thesis in food technology and food engineering, national ECOTROPHELIA competitions, several industrial and traditional food producers workshops on safe production, trends in packaging, new products development, IPR protection, innovation ecosystem and technology transfer in the food sector, beer symposia. SAFT is a collective member of EFFoST.

<https://upts.org.rs/>

Contact Person

Prof Viktor Nedovic, President of Serbian Association of Food Technologists



WIBUBA BAR

WiBuBa bars - nutritional support for conception, pregnancy and breastfeeding from natural sources.



WiBuBa bars are a set of three delicious granola bars that deliver nutritional support to women (and their partners) on their journey from a “wish” to a healthy baby with the help of carefully selected nutrients of natural origin. The journey of 1000+ days starts three months before conception, continues through the pregnancy and carries on in the first two years of a baby’s life. This is a period when nutrition has the biggest impact on the health of our little ones. With a balanced diet during this time we can program the expression of genes, responsible for the proper development of baby’s organs and tissues, which has lasting consequences and can lower the risk of chronic diseases later in life. With a scientific approach and careful selection of important nutrients we have created unique mixtures of natural ingredients and packed them in crunchy granola bars with soft filling. The journey of 1000+ days starts with a WISH bar rich in natural sources of antioxidants and folate which are important for conception. Then it continues with a BUMP bar full of nutrients important for the healthy development of a baby. The last one is BABY bar, which help with the milk production. WiBuBa bars are also environmentally friendly. They are carefully wrapped in recyclable paper and produced by a company 1000+ whose philosophy is based on nurturing and supporting people and our planet.

Team Members

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Contact Person

Dr Evgen Benedik, Professor



FEDERATION

Chamber of Commerce and Industry of Slovenia – Chamber of Agricultural and Food Enterprises – CCIS-CAFE

CCIS-CAFE is an independent, voluntary, non-profit, interest group of legal entities. It comprises the interests of around 248 agricultural & food companies, and is the biggest association of agricultural and food companies in Slovenia. We represent interests of our members with respect to state authorities, institutions, trade unions, European associations and institutions of the European Union. As a representative of the national food industry association CCIS-CAFE is a multiple purpose adviser and develops strategic partnerships for the purpose of innovation. We offer our members professional help in form of consulting, information, education and training.

https://www.gzs.si/zbornica_kmetijskih_in_zivilskih_podjetij

Contact Person

Dr Tatjana Zagorc, Director
Ms Maja Oblak, Junior consultant



15 COMPETING COUNTRIES

 SPAIN

TORREZNOS VEGGUISS

Snack made from texturized pea protein, which is subjected to various treatments.

 **Tecnocampus**

Centres universitaris adscrits a la

 **UPF** Universitat
Pompeu Fabra
Barcelona

UVa

**PA-
LEN
CIA**

The «Torreznos Vegguiss» resemble a traditional torrezno, with a crunchy outer part, which is due to the frying, and a juicy inner part, due to the hydration to which the piece of protein is subjected. Thanks to these treatments we get the texture and flavor that reminds us of the typical torrezno from pork, a typical Spanish tapa that we can find in the bars of this country.

We have opted for a product aimed mainly at the vegan population, because the veggie trend is growing more and more in almost all countries of the world. According to studies carried out in (Veganism in the world, 2020), the vegan market in Europe has increased by 49% in just two years, reaching a total of 3,600 million euros in sales.

Team Members

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Tecnocampus Mataró-Maresme
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Contact Person

Mrs Luz Fernández del Rey, Head
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Tecnocampus

 **FIAB**
We feed
the future 2025

FEDERATION

**Federación Española de Industrias de
Alimentación y Bebidas – FIAB**

The Spanish Food and Drink Federation (FIAB) was established in 1977 to represent the Spanish food and beverage industry through a single body and one voice. Its main activity is to inform the sector of the main developments that may affect its operation and competitiveness. It also represents its interests in different government and decision-makers, both nationally and at the European and international scope. Currently it encompasses 45 associations and 5,000 companies. FIAB is member of FoodDrinkEurope promoting its members' interests in areas such as food safety and science, nutrition and health, consumer trust and choice, competitiveness and environmental sustainability.

<http://fiab.es/>

Contact Person

Mr Mauricio García De Quevedo, General Manager
Ms Concha Avila, RDI European Projects Manager

TOTALLY NUTS

Totally Nuts is the first plant-based “feta” alternative that is made from upcycled almonds.



Finally, there is a change! More and more consumers tend to consume plant-based products instead of dairy and meat. But have you ever thought of what is happening to the food that is used to produce other food or beverage items?

Let's think about it: What happens to the leftovers of almond milk production? Clearly, they use almonds for the milk production, but the resulting product is a liquid, right? So, what happens to the almond solids?

Long story short: they are not used to their full potential. We know, almonds themselves are not very sustainable, but how bad is it to waste something that is already here anyway and could possibly be used for something new? This is where everything started! We are a young, enthusiastic team and we developed Totally Nuts. Totally Nuts is the only plant-based “feta” alternative that uses upcycled almonds to build a bridge between waste and innovation, or as we say: “We care. We upcycle.”

Totally Nuts stands out for its uniqueness on the market, its sustainability aspect but also for its feta-like texture and taste! You can enjoy Totally Nuts on literally every dish- your salad, wrap, pasta, pizza, or on its own. And the good news is not over yet, because compared to other plant-based feta alternatives our product is healthier as we use significantly lower amounts of sodium and saturated fatty acids!

Team Members

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Contact Person

Dr Mireille Stijns, Assistant Professor/UD



FEDERATION

TKI Agri&Food

To take advantage of societal and economic opportunities Agri & Food stimulates the development of new knowledge and innovations. TKI Agri & Food coordinates the forming of the innovation agenda, takes care of the research programming, and advises the top team of the Topsector about decisions to be made with the Minister for Economic Affairs. Furthermore, a team of innovation brokers is ready to support entrepreneurs with the development of innovation by connecting them to the right networking partners and aiding them in finding financial support.

<https://topsectoragrifood.nl/>

Contact Person

Mr Kees de Gooijer, CEO
Mrs Marleen Scholte, Secretary

15 COMPETING COUNTRIES

 UNITED KINGDOM

CRACK(ER)ED IT

Fruit and oat crackers, made using strawberries, raspberries and blackberries with herbs and spices.

Are your taste buds bored of bland, uninspired crackers? Are you on the hunt for your new favourite savoury snack? – Yes? The good news is Crack(er)ed it are here to bring you the solution, by delivering crackers into the modern age for the modern consumer.

We are upgrading crackers with ambitious flavours, bold colours, inclusive ingredients, and a sustainable approach to product development.

In 3 exciting variants; Strawberry & Black Pepper, Raspberry & Basil and Blackberry & Cardamom. Our flavours are uniquely inspired by the fruit that makes up 38% of our crackers, sourced from fruit vinegar production facilities where it would otherwise have gone to waste.

Crack(er)ed it are dairy and gluten free, as well as high fibre, and suitable for vegetarians, whilst containing only natural sugars with no artificial colours or flavours – we really have cracked it!

Inspired by bees and their honeycomb homes, our crackers are shaped into hexagons to reduce cracker dough wastage during production and create an enticing appearance. Oh and did we mention, they're pink!

To reduce waste even further our crackers are packed in an internal PLA packet, made using waste plant starches, before final packaging in a recycled cardboard hexagonal box that is sure to stand out on the shelf.

If you are interested in finding out more about Crack(er)ed it, looking for cheese pairings, other topping ideas or to keep up to date on our future successes, follow our Instagram @crackered_it.

Team Members

Katherine Tolson
Kieren Spouge
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<https://www.nottingham.ac.uk>

Contact Person

Mr Gleb Yakubov, Assistant Professor
in Food Composites



FEDERATION

Institute of Food Science and Technology – IFST

IFST is the UK's leading professional body for those involved in all aspects of food science and technology. We are an internationally respected independent membership body, supporting food professionals through knowledge sharing and professional recognition. Our membership comprises individuals from a wide range of backgrounds, from students to experts, working across a wide range of disciplines within the sector.

<https://www.ifst.org/>

Contact Person

Mr Jon Poole, Chief Executive
Ms Patricia Florit, Education Coordinator



PANGEA TEAM

REFRESH

“REFRESH” is a beverage made from tiger nuts, spirulina, peppermint, and orange peel alginate bubble.

The European Boba Company was founded by eleven international students to turn knowledge, ideas, and experiences into a food product that better suits the changing demands of the consumers, but at the same time, helps to adopt a healthier lifestyle. The mission of the “bubble tea drink” called REFRESH, is to satisfy modern and busy consumers’ needs, by providing a healthy to-go drink which is engaging and refreshing. REFRESH’s vision is to shape the rising trend of bubble tea consumption and to benefit from it. REFRESH contributes to the consumer’s need for its daily intake of dietary fiber, calcium, and vitamins while being low in sodium and sugars and offering a low caloric value. Its singular blue color is obtained using spirulina, which is a type of blue algae with strong antioxidant effects. An additional innovative characteristic of the beverage is its holistic environmental approach, which is revealed throughout the whole production chain, starting from its ingredients (i.e., use of orange peels and pulp, sustainable plants) and ending with its packaging (PLA bottle – compostable bioplastic). The energy demand will be met with solar panels installed on our roof. As a preservation method, we decided to use high-pressure pasteurization as it is a very gentle way to extend the shelf life of our product up to two weeks. With this novel technique, it is possible to maintain the original ocean blue color and all the nutrients inside our beverage after pasteurization.

Team Members

- Alba Escriva
- Anja Kokelj
- Damien Chaborel
- Efstathia Skiathiti
- Henrike Heinike
- Juliette Olech
- Karoline Costa Pinto
- Lukas Dachs
- Mateo Jean
- Nika Tasler

Contact Person

- Ms Reine Barbar
- Ms Denisse Bender
- Ms Anja Bolha
- Ms Purificación García Segovia
- Ms Maria Gerekou
- Ms Mojca Korošec
- Mr Aleš Kuhar
- Ms Agnes Marsset-Baglieri
- Mr Javier Martínez Monzó
- Ms Paloma Poiré

Universities

Institut Agro Montpellier
<https://www.institut-agro-montpellier.fr/>

AgroParisTech
<http://www2.agroparistech.fr/>

Universitat Politècnica de Valencia
<http://www.upv.es/es>

Universität für Bodenkultur Wien
<https://boku.ac.at/>

University of Ljubljana
<https://www.uni-lj.si/university/>

Agricultural University of Athens
<https://www2.aau.gr/en>



OUT OF COMPETITION



FEEDTHEMIND

Food-related European Education in the Digital era to Motivate Innovative New-product Development

FEEDtheMIND was a 3 years ERASMUS Plus project aiming to adapt, test and implement a digital pedagogical platform focusing on the development of an innovative food product; facilitate the exchange of pedagogical methods between the different European HEIs partner organisations; contribute to the rethink of the curriculum design by enabling HEIs to provide online courses. Ultimately, this project aims to foster entrepreneurship among students attending food-related degrees.

The project was supported by 6 universities, from 5 European countries: Austria, France, Greece, Slovenia and Spain.

The first two years of the project were dedicated to the evaluation of the needs and the creation of the platform and its content. The last year was mainly focused on the creation and accompaniment of a transnational team, made of students from the partners universities, to present their project at ECOTROPHELIA Greece. The team had to create an innovative food product remotely, using the platform to help them, while the partners were available to coach them. In February, two weeks meeting were organised, allowing the team to meet, work together on the project and finally build a real team!

On July 5th, Pangea team presented their project in front of the Greek ECOTROPHELIA jury. The opportunity for them to meet again and have professional feedback on their product and project. The team will now present the project at ECOTROPHELIA Europe (out of competition), on October 2022.



EEIG ECOTROPHELIA EUROPE



Bringing together the food industry through innovation and entrepreneurship

ECOTROPHELIA Europe EEIG is a European Economic Interest Grouping that aims to unite stakeholders from different Member States together around a common objective and brings together food industry actors from eight different countries to promote innovation and entrepreneurship in the European food industry through implementing and developing innovative programmes.

In particular, the EEIG, with the assistance of its members, aims to:

- Promote cooperation and exchanges between SMEs and universities, research institutes, public and private bodies involved in food innovation.
- Define policies, organise the European ECOTROPHELIA Europe competition and promote participation in the Competition and its results.
- Promote excellent education programmes linked to food innovation.
- Increase awareness and spreading information, particularly to students and young entrepreneurs.

It is in this context that ECOTROPHELIA carried by the EEIG has become a Food Innovation Laboratory.

EEIG Members

The members of the EEIG are trade unions from eight European countries representing the interests of national food companies, the European Union food industries: ANIA - France, FEVA - Belgium, FIAB - Spain, SEVT - Greece, CCIS-CAFE - Slovenia, FII - Iceland, LVA - Austria and FoodDrinkEurope.

Réunir les acteurs de l'alimentation autour de l'innovation et promouvoir l'entreprenariat

Le GEIE ECOTROPHELIA Europe est un Groupement Européen d'Intérêt Economique qui vise à fédérer les parties prenantes de différents Etats membres autour d'un objectif commun. Ce groupement rassemble des acteurs de l'industrie alimentaire de 8 pays différents dans le but de promouvoir l'innovation et l'entreprenariat dans l'industrie alimentaire européenne, à travers la mise en œuvre et le développement de programmes innovants.

En particulier, le GEIE vise, avec l'aide de ses membres, à :

- promouvoir la coopération et les échanges entre les PME avec les universités, les instituts de recherche, les organismes publics et privés impliqués dans l'innovation alimentaire,
- définir les politiques, organiser la compétition européenne ECOTROPHELIA Europe et promouvoir la participation au Concours et ses résultats,
- promouvoir des pédagogies d'excellence liées à l'innovation alimentaire
- accroître la sensibilisation et la diffusion de l'information, en particulier auprès des étudiants et des jeunes entrepreneurs.

C'est dans ce contexte qu'ECOTROPHELIA porté par le GEIE est devenu le Laboratoire de l'innovation alimentaire européen.

NESTLE



Good Food, Good Life

Nestlé is the world's largest food and beverage company. It is present in 187 countries around the world, and its 291,000 employees are committed to Nestlé's purpose of enhancing quality of life and contributing to a healthier future. Nestlé offers a wide portfolio of products and services for people and their pets throughout their lives. Its more than 2000 brands range from global icons like Nescafé or Nespresso to local favourites like Ninho. Company performance is driven by its Nutrition, Health and Wellness strategy. Nestlé is based in the Swiss town of Vevey where it was founded more than 150 years ago.

At the heart of the Nestlé research and development network lies the Nestlé Research Center (NRC), based in Lausanne, Switzerland. Its core purpose is to provide the scientific knowledge and research base needed to drive product innovation and renovation.

The NRC is home to a staff of about 600 people, including more than 250 PhD scientists of about 50 nationalities, with a diverse range of competencies. The expertise of NRC scientists is complemented by a wide reaching network of external partners such as universities, private research institutes, hospitals and start-up companies.

Nestlé has the world's largest private food and nutrition R&D organization, involving about 3,900 people on 23 sites around the world. Find out more: www.nestle.com

Nestlé est la plus grande entreprise mondiale dans le secteur «alimentation et boissons». Nestlé est présente dans 187 pays et ses 291,000 employés sont engagés à soutenir l'objectif de Nestlé d'améliorer la qualité de la vie et contribuer à un avenir plus sain. Nestlé offre un large éventail de produits et de services pour les personnes et leurs animaux de compagnie tout au long de leur vie. Avec plus de 2000 marques dont des icônes mondiales comme Nescafé ou Nespresso aux favoris locaux comme Ninho, la performance de l'entreprise repose sur sa stratégie Nutrition, Santé et Bien-être. Nestlé est basée dans la ville suisse de Vevey où elle a été fondée il y a plus de 150 ans.

Au cœur du réseau de recherche Nestlé se trouve le Centre de Recherche Nestlé (CRN), basé à Lausanne. Son but fondamental est de fournir les connaissances scientifiques et la base de recherche nécessaires pour stimuler l'innovation et la rénovation des produits.

Le CRN héberge une équipe de 600 personnes, avec plus de 250 chercheurs de 50 nationalités différentes, représentant un large éventail de compétences scientifiques. L'expertise des chercheurs du CRN est complétée par un réseau de grande portée de partenaires extérieurs tels les universités, les instituts de recherche privés, les hôpitaux, et les entreprises start-up.

Nestlé a la plus grande organisation privée de R&D dans le secteur de l'alimentation et de la nutrition, regroupant environ 3,900 personnes sur 23 sites répartis dans le monde. En savoir plus: www.nestle.com

CAMPDEN BRI UK



The food and drink industry is particularly dynamic and continues to present challenges, particularly those related to innovation and sustainability. To ensure the industry continues to grow and meet these challenges both now and in the future, it is essential to attract creative, intelligent, gifted students.

ECOTROPHELIA encourages the brightest students to consider a career in the food and drink sector and gives them a unique opportunity to participate in a 'real-life' food innovation and development process and gain key practical skills that you just couldn't get from a text book.

As the world's largest independent membership-based organisation carrying out research and development for the global food and drinks industry, we are committed to supporting young and emerging talent in the food and drink industry and are proud to support ECOTROPHELIA.

L'industrie agroalimentaire est particulièrement dynamique et continue de présenter des défis, en particulier ceux liés à l'innovation et au développement durable. Pour s'assurer que l'industrie continue de croître et puisse répondre à ces défis - présents et futurs - il est essentiel d'attirer les étudiants doués, intelligents et créatifs.

ECOTROPHELIA encourage les étudiants les plus brillants à opter pour une carrière dans l'industrie agro-alimentaire et leur donne une opportunité unique d'acquérir des compétences clés en participant à cet exercice pratique de création d'entreprise et de développement de produit éco-innovant.

Campden BRI - le plus grand centre technique et de recherche indépendant pour l'industrie agroalimentaire à l'échelle mondiale - s'engage à soutenir les jeunes et nouveaux talents dans le secteur alimentaire et nous sommes fiers de soutenir ECOTROPHELIA.

MINISTRE DE L'AGRICULTURE ET DE L'ALIMENTATION



Investing in the future also means investing in our agriculture and in our food, trusting the younger generations, focusing on entrepreneurship, creativity and innovation. These themes will be at the heart of the recovery plan to promote quality food, local, accessible to all and that takes care of everyone.

It is only natural that the Ministry of Agriculture and Food has been a partner of ECOTROPHELIA France and ECOTROPHELIA Europe since its creation. In the continuity of the General States of Food, the renewal of the support to these two important student competitions, a veritable showcase of food diversity and creativity, makes perfect sense.

The public policies implemented by the Ministry of Agriculture and Food are intended to:

- Encourage new production and transformation models, in a logic of multi-performance, which respects the agroecological transition;
- Improve the competitiveness of agricultural and agri-food production and support exports;
- Ensure food safety, animal and plant health, animal welfare;
- Develop safe, healthy, sustainable and quality food, accessible to all;
- Promote the educational, professional and social integration of both youth and adults through agricultural education of excellence established in our territories;
- Monitor the payments of the Common Agricultural Policy and negotiate France's interests at European and international levels, in agriculture and agri-food.

The transformations underway, be they environmental, societal or technological, are challenges for our agriculture and our food, which research and teaching can help meet. We can be proud of French agriculture and food.

Investir dans l'avenir, c'est aussi investir dans nos agricultures et dans notre alimentation, faire confiance à la jeunesse, miser sur l'esprit d'entreprise, la créativité et l'innovation. Ces thèmes seront au cœur du plan de relance pour renforcer une alimentation de qualité, locale, accessible à tous et prenant soin de chacun.

C'est tout naturellement que le ministère de l'Agriculture et de l'Alimentation est partenaire d'ECOTROPHELIA France et ECOTROPHELIA Europe depuis l'origine. Dans la continuité des États généraux de l'alimentation, le renouvellement du soutien à ces deux importants concours étudiants, véritable vitrine de la diversité et de la créativité alimentaires, prend tout son sens.

Les politiques publiques mises en œuvre par le ministère de l'Agriculture et de l'Alimentation ont vocation à :

- Encourager de nouveaux modèles de production et de transformation, dans une logique de multi-performance, qui respecte la transition agroécologique ;
- Améliorer la compétitivité des productions agricoles et agroalimentaires et soutenir les exportations ;
- Assurer la sécurité sanitaire des aliments, la santé animale et végétale, le bien-être animal ;
- Développer une alimentation sûre, saine, durable et de qualité, accessible à tous ;
- Favoriser l'insertion scolaire, professionnelle et sociale des jeunes et des adultes grâce à un enseignement agricole d'excellence implanté sur nos territoires ;
- Assurer le suivi des paiements de la Politique agricole commune et négocier les intérêts de la France aux niveaux européen et international, en matière agricole et agroalimentaire.

Les transformations en cours, qu'elles soient environnementales, sociétales ou technologiques sont autant de défis pour notre agriculture et notre alimentation, que la recherche et l'enseignement peuvent contribuer à relever. Nous pouvons être fiers de l'agriculture et de l'alimentation françaises.





Dr Maarten
VAN DER KAMP



Director of Education, EIT Food

ECOTROPHELIA has teamed up with EIT Food to provide concentrated entrepreneurship education for all participants in the national and international competitions. I am delighted that this collaboration brings together Europe's biggest food innovation competition and Europe's leading ecosystem for food system transformation. EIT Food's vision is a world where everybody can access and enjoy sustainable, safe and healthy food, with trust and fairness from farm to fork. We invest in projects, individuals and organisations that share that vision to deliver positive impact at speed and scale. Education is one of our key activities to ensure bright minds have the skills to make a real difference, and to build a more entrepreneurial culture in the food system. The training we developed for ECOTROPHELIA reflects this: it provides key entrepreneurial skills in concise blocks to help participants in the competition push their ideas further towards impact. We look forward to working with you!



EntreCompFood



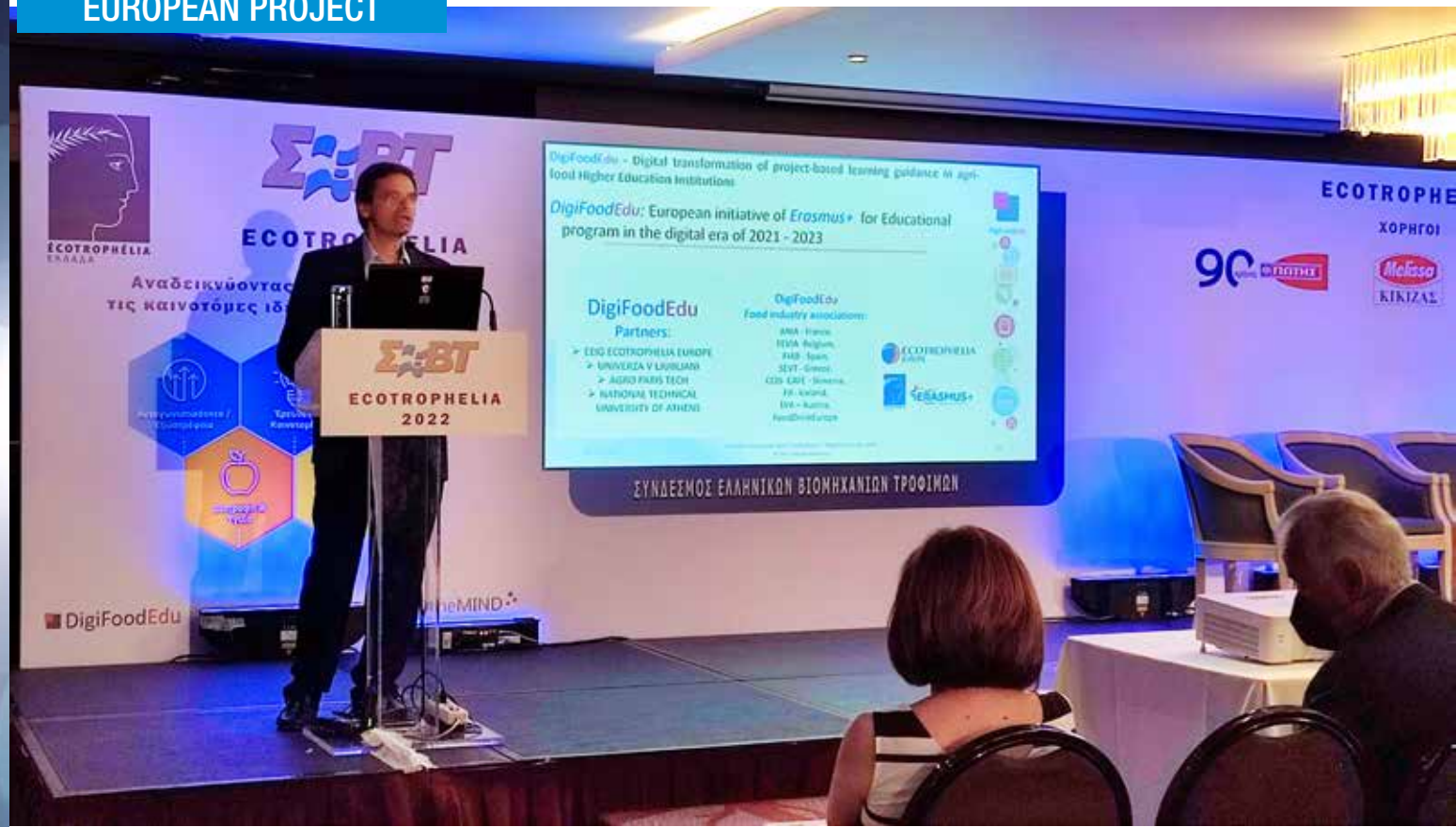
The European agri-food industry is not attracting enough young people to the sector. Thus, tensions affect businesses, generating a gap between education and the world of work which needs to be overcome.

The main objective of the EntreCompFood project is to build sound European Collaborative Communities of practice (CoCos) and related learning activities to stimulate innovation and entrepreneurship towards students and young food entrepreneurs (main targets of the project).

Six partners from three EU countries compose the consortium (see <https://www.gzs.si/entrecompfood/>). The main learning outcome based on EntreComp will be new curricula covering 6 preidentified EntreComp skills (Creativity, Vision, Motivation and perseverance, Mobilising resources, Working with others, Learning through experience).

Moreover the EntreCompFood Project is supporting the ECOTROPHELIA Europe entrepreneurship award.





In this context, DigiFoodEdu aims to foster the development of digital skills and exchange of good pedagogical practices in the digital era, directed at the guidance of project-based learning approaches. This project intends to study the practices put in place during the pandemic, collect and analyse the experiences from different partners European-wide and come up with a best practices guide for education improvement in the digital era. Ultimately, the project will aim for the modernisation of the pedagogical practices used for coaching and supporting students during their project-based learning activities.

To do so, we needed to identify and analyse the best pedagogical practices put in place by universities. According to the survey to be answered by students and teachers we launched, we observed a change in pedagogical practices from traditional ones in face to face to digital and online ones such as learning management systems (Moodles), online class, share of digital resources (photos, videos). Lab practices was the most difficult to replace with online learning. Efforts made by teachers to find alternative ways (videos, photos...) were not enough. Students need to manipulate utensils to better understand the processes but these materials are very good to complement lab practices. The use of digital tools was very appreciate and should be kept in the future, even in traditional courses, to foster learning and keep students' attention. The study also allow to emphasize the necessity of breaks for students, even more when online learning. As conclusion of this survey, in the future, teachers agree on the utility of some aspects of online learning and plan to integrate it or some practices in complement to traditional courses.



DigiFoodEdu

Digital transformation of project-based learning guidance in agri-food Higher Education Institutions

DigiFoodEdu is born with the coronavirus crisis when the pedagogical issues reveal. In fact, because of the sanitary situation, the teaching way changed suddenly from face-to-face to distance learning. The teachers and the students had to adapt themselves to new ways of distance teaching and learning and had to develop new pedagogical practices based on digital practices. Project-based learning approaches, and practical classes, that require more guidance and support from teachers and pedagogical staff, were particularly affected by this transition. 4 partners from 3 different countries: the University of Ljubljana (Slovenia), the National Technical University of Athens (Greece), the National Institute of Technology for Life, Food and Environmental Sciences – AgroParisTech (France) and the EEIG ECOTROPHELIA EUROPE are involved in this 2 years ERASMUS Plus project, started in April 2021.

Another survey was launched among teachers and students to analyse the needs of students and HEI. Results conclude that both faculty and students needed to adapt to the distance teaching modality and to become familiar with the use of new digital tools, as the remote classes are not popular in project-based or practical course compared to theoretical courses. Obviously, the imposition of distance teaching due to COVID-19 outbreak set a precedent in education and the future will be different. The technical skills acquired from distance courses will generally improve the educational competence of the teachers. Overall, distance teaching modality will be very useful and provide benefits, if there is the right technical support, the necessary equipment, and the class material is properly planned in advance.

In addition to the universities point of view, we wanted the professional one regarding the impact of the COVID-19 on young graduates' recruitment. The survey shows no impact of the COVID-19 crisis on recruitments of young graduates in the agri-food sector, with similar difficulties that existed before. However, specific work condition demand as emerge with the COVID-19. Internships and placements have been quite impacted by the crisis depending on the country (Greece was more impacted) which was an issue as professional appreciate and encourage previous experience of young graduates thanks to internships which help acquiring specific skills in the work area, autonomy, management and social skills. The last year of the project is focusing on testing the pedagogical practices identified and write the good pedagogical practices white book which will help professors improving their pedagogical practices and ultimately improving education.



Website



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