

The logo for AZT Innova, featuring a yellow circle with a white 'A' inside, followed by the letters 'ZT Innova' in white. The 'i' in 'Innova' has a yellow underline.

AZT Innova

A woman with her hair in a bun, wearing a light-colored, textured garment, is shown in profile, smelling a bouquet of white and pink flowers. The background is dark blue. The woman's hair is styled in a bun. She is holding a bouquet of flowers, including white and pink blossoms. The overall mood is serene and natural.

EATrends 2022

Dietary innovation connected
to consumers

Prologue

Let's get started. OK, it's true, we're not a trend spotting agency, that's not what we do. [AZTI](#) is a technological centre. So what are we doing talking about trends?

We may not be mega experts in consumer trends, but we know about food (a lot in fact) and science, and we also know a fair bit about consumers.

That's why we set off to do some research and identification in trends. Trends that impact diet: our EATrends.

Because they help us to understand what's happening in the world of food consumption, they offer clues about the changes that happen to people's needs, preferences, beliefs and behaviours.






And knowledge like this is essential for science, to provide focus for food research. It's also indispensable for food companies, to identify opportunities for innovation and to enable them to match new products to their customers' changing needs.

A win-win situation where no one loses: people get the solutions they need and companies get it right with their innovation commitments.

And science is right there to make the connections happen: it's the magic that makes needs and desires a reality.

EATrends are the guiding star that shows us the way to food innovation.

What will you discover in this document?

-  Clues to help you get to know a constantly changing consumer and identify emerging needs and behaviours.
-  Evidence: movements of companies that are offering innovative solutions to changing demands, and that are disrupting the food supply.
-  The opportunities that all this offers to the food business.
-  The important role of science as a generator of new knowledge in the food sector.
-  Data to back up the EATrends we have identified.

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0. Introduction

A setting for transformation and reinvention

Understanding the context that we move in

We have never experienced a global crisis of such dimensions. It has shaken up our lives in the short term and is going to have mid-long term repercussions..

We are now living through a process of constant reinvention (with new waves and variants of COVID-19 now, we hope, in its final throes) that affects our lifestyles, economies, politics and the social landscape.

In the food sector, disruptions to supply chains, "food insecurity", the reinvention of sectors such as horeca and distribution, the climate change that now threatens traditional food production systems... are just some of the global challenges that have now become systemic and are transforming companies' and people's behaviours.

We are living through uncertain and changing times. But the bigger the challenges, the greater the opportunities to make a difference, progress and build a better future.

A setting for transformation and reinvention

Understanding the context that we move in



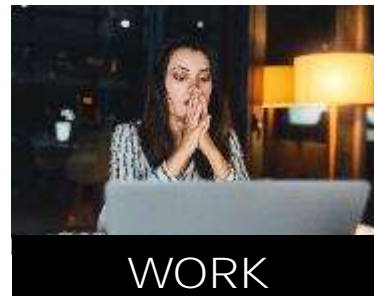
HABITS

2022 could be the year when new lifestyles and habits are consolidated (both personal and professional).



RESOURCES

Economies are on the brink of collapse: supply shortages and inflation aggravate the resources crisis.



WORK

Unemployment, temporary downsizing systems and job insecurity worsen an already unstable labour market.



POLITICS

More protectionist and nationalist. Geopolitical tensions between superpowers are growing.










SOCIETY

Severe polarisation, social unrest. Instincts of survival and resilience are on the increase. Crisis of trust and credibility.

MEGATRENDS



<p>Food Sector </p> <p>Drivers: health, sustainability, convenience.</p> <p>Omnichannel retailing.</p> <p>"Direct to consumer" models.</p> <p>Food tech power.</p> <p>Food insecurity.</p> <p>High-tech production.</p> <p>New raw materials.</p> <p>Reinvention of HORECA sector</p> <p>Logistics and delivery boom.</p>	<p>Society </p> <p>Increase in mental illness.</p> <p>Thoughtful consumption.</p> <p>Home as centre.</p> <p>Ageing.</p> <p>Teleworking</p> <p>Urbanisation.</p> <p>Social unrest, inequalities.</p> <p>Survival and resilience.</p> <p>Crisis of confidence and credibility.</p> <p>Problems of socialisation vs isolation and loneliness.</p>	<p>Economy </p> <p>Slowdown and restrictions on economic activity.</p> <p>Increased inflation.</p> <p>Economic stimuli of the Recovery Fund.</p> <p>Temporary downsizing plans and other systems.</p> <p>Growing debt.</p> <p>Changes of economic power (major growth in emerging countries).</p> <p>Disruption of supply chains.</p> <p>Volatile energy prices.</p> <p>Post-Brexit economic relationship.</p>	<p>Legislation </p> <p>Job reforms.</p> <p>"Stable-to-table" strategy.</p> <p>European Green Deal.</p> <p>Spanish Climate Change Act.</p> <p>New regulations on waste and packaging.</p> <p>Future law against food loss and waste.</p> <p>Unhealthy food and drink advertising that targets children.</p> <p>Draft bill to improve food chain operations.</p> <p>Initiative to update regulation of animal welfare.</p>
<p>Technology </p> <p>Accelerated digitalisation.</p> <p>Data economy</p> <p>Food tech explosion.</p> <p>Growth in biotechnologies.</p> <p>Hyperconnectivity.</p> <p>Metaverse.</p>	<p>Politics </p> <p>Protectionist polices.</p> <p>Nationalist movements.</p> <p>Migrations.</p> <p>Geopolitical tensions.</p> <p>Recovery, Transformation and Resilience Plan.</p>	<p>Environment </p> <p>Climate crisis.</p> <p>Depletion and competition for resources.</p> <p>Loss of biodiversity.</p> <p>Circular economies.</p> <p>Food waste.</p> <p>Alternatives to plastic.</p>	

Consumption drivers

Constantly changing consumers

Environmental drivers act as catalysts for consumption macrotrends, the setting for constant changes in human needs, expectations and behaviours.

Trends that contain underlying basic human, global and permanent needs, but which are expressed in many different ways. Some of them are stronger than ever in these uncertain times: security and control, trust, well being, connectivity and justice.

The impact of the pandemic on our lives, over such a long period, has had a decisive effect on attitudes and mentalities, transforming people's priorities and habits.

Consumers are now increasingly thoughtful and committed, they have had to deal with insecurity, impotence, frustration, apathy and despair...and they are learning to live with the physical and psychological consequences of COVID-19.

Consumption drivers

Constantly changing consumers

People who...

- have learnt to live with constant uncertainty
- act cautiously, and have seen their purchasing powers reduced.
- live with social unrest and periods of isolation
- have woken up and rebel against inequality, injustice, instability
- criticise lack of action and demand credibility from governments and businesses

Technology, consumption of values, health and well being, trust and experiences are some of the main drivers of the current changes in people's expectations, needs and behaviours.

Are the changes here to stay?

Main drivers of change

People's expectations, needs and behaviours



TECHNOLOGY

Basic ally in decision making. Facilitator of hybrid ways of life, consumption and work. Use of technology has caused a surge in new expectations.



VALUES

Greater social and environmental awareness leads to more aware consumption. With a gap that's still notable between intentions and real behaviour.



WELLBEING

Vulnerability to the pandemic has put physical and mental health and well being in the front line of priorities.



TRUST

Honesty and transparency are increasingly important values for gaining trust. The demand for proof and tangible benefits is on the increase.



EXPERIENCES

The period of limitations gives way to the search for getaways. Technology encourages the discovery of new stimuli.

Portrait of the consumer



WHAT DO THEY DO?

- They get information: they check labels, follow the news.
- They try to have or have a healthy diet.
- Connected, always “on”.
- Accustomed to online shopping.
- They try to contribute towards caring for the environment and their immediate surroundings with small actions.



WHAT DO THEY THINK?

- I want to know more about what I eat.
- My health and my **family's** health is the most important thing.
- No place like home.
- I like to try new things
- I trust producers more than the food industry.



WHAT DO THEY SAY?

- I like to take care of myself and eat healthily.
- I like to be as physically active as possible.
- I'm interested in brands that care about people and the environment.
- I trust my habitual supplier, the one that's nearby.



Science speaks



“

We have to actively listen to consumers and involve them as an essential part of the innovation process, so we can design more effective and successful innovative solutions, adapted to their tastes and preferences.

“

Consumers should always be present from start to finish: explore their preferences and habits, discover their needs, collaborate with them in thinking up new products and in the subsequent sensory evaluation.

“

It's essential to pay attention to their declared perceptions and to their real, natural and unconscious behaviour (through observation or with neuromarketing technologies).



Elena Santa Cruz
Consumer & Sensory Team (AZTI)

Rethink



- ⚡ Have you identified what consumption habits and mentalities have really changed and consolidated?
- ⚡ Do you align your strategy and the products/services you offer with current social demands and consumer behaviour?

FRAMEWORK of trends

MegaTRENDS
Forces that model change

MacroTRENDS
In consumption lifestyles, attitudes and behaviours

MicroTRENDS
Trends that have a short term impact on the sector



1.

EATrends MACRO

SUSTAINFOOD

TRUST4FOOD

LOCALFOOD

SOCIALFOOD

BETTER4ME

EATERTAINMENT

SMARTFOOD

SUSTAINFOOD

Consumers and companies are living in a state of **“eco-anxiety”**: concern about the climate emergency is growing. Guilt feelings are the main driver behind changing behaviours.

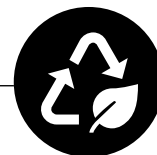
We are aware of the impact of food production and consumption on the environment: of our contribution to climate change and the hazards it poses for the food system.

The real ethical and environmental behaviour of companies and consumers is under the spotlight. And the need to evolve towards more sustainable economic activities and lifestyles is an increasingly urgent one.

We all want to move towards making a positive impact. Our “eco-anxiety” is the driving force behind shopping decisions and is turning company strategies into circular ones.



The age of green power



SUSTAINFOOD

Science speaks



Leire Arantzamendi
Marina and coastal environmental management (AZTI)

SUSTAINABILITY DRIVES AQUACULTURE PRODUCTION AND CONSUMPTION OF AQUACULTURE PRODUCTS



Most powerful drivers for aquaculture producers and consumers:

Sustainability: minimising environmental impact on marine ecosystems

Health: aquaculture products provide healthy nutrients

Fish nutrition: alternative ingredients, non-exploitation of fish stocks.

Animal welfare, priority action line in the new Europa 2030 aquaculture programme.

Added value fishery products (ecological, local...)

Main focuses in current and short term aquaculture production:

Production of marine species further away from the coast to increase production capacity and respond to growing demand for fish.

Aquacultural production with reduced environmental impact: cultivation of species such as molluscs and algae.

Major growth forecasts for the algae sector.

Technification and centralisation of production. Plans for large platforms where aquacultural activities, renewable energy production, etc. come together.



SUSTAINFOOD

Rethink



- ⚡ How can you ensure that sustainability costs for your products and services are not passed on to customers?
- ⚡ Going beyond the strategies for 2030... how are you going to focus your short term sustainability objectives for real and immediate change?

TRUST4FOOD

COVID-19 has increased the already yawning gap of trust and credibility caused by feelings of disinformation and powerlessness.

In an ever more digitalised world, where everything is more intangible and where we can buy food with just one click, consumers need brands that they can trust. Digital fingerprints awaken concern about who has access to data and how they are used. And consumer expectations are increasing; they expect more from companies that should be up to date with consumer needs and preferences.

Faced with an avalanche of information and misinformation, people are looking for trust through facts and evidence that can help them overcome the distrust associated with food production and processing.



Recovering lost trust



TRUST4FOOD

Science speaks



Amaia Lasagabaster
Food Quality and Safety (AZTI)

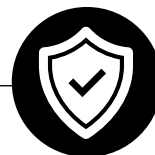
BACTERIOPHAGES AS A NATURAL WEAPON AGAINST FOOD PATHOGENS



Consuming food contaminated with pathogens (*Listeria monocytogenes*, *Campylobacter*...) can affect consumer health and safety. **Phages are the natural enemy of bacteria**, but are totally harmless for plants, animals and humans.

The new tools based on bacteriophages can be used to **guarantee food safety** by controlling pathogens in aquaculture, animal production and food processing. Unlike antibiotics, they very specifically infect the problem pathogen without affecting other bacteria. **Using phages is safe, natural and sustainable.**

There is **a lot of acceptance** of the use of phages against *Campylobacter* amongst producers (90%) and consumers (85%).



TRUST4FOOD

Science speaks



Alex Barranco
Food Quality and Safety (AZTI)

FAST NEW TOOLS TO DETECT FOOD CONTAMINANTS



“

The presence of contaminants in food can be dangerous for the end consumer. Companies in the food sector are demanding **new formulae to ensure food safety** and new tools to control and detect contaminants.

“

The new development: one single KIT to detect different types of contaminants.

The added value:

- **More autonomy** for food producers and companies when controlling contaminants
- **Streamlined** detection (from days to hours), management and decision making
- **Savings** (fewer samples sent to external laboratories)



TRUST4FOOD

LOCALFOOD

Local products continue to attract consumers: origins have a range of positive and emotional connotations. But the pandemic brought about a change and boosted this trend, which led to many reconsidering the origin of the products that they consumed.

People looked for trust and closeness in local products, and wanted a guaranteed supply of goods and services.

The pandemic made city dwellers look at the neglected rural setting, and have given a major boost to making cities friendlier and bringing food production to the places where it is consumed.



Reclaiming origins



LOCALFOOD

SOCIALFOOD

Social problems are becoming a focal point for action by companies, driven by global awareness and solidarity created by the climate crisis and the pandemic.

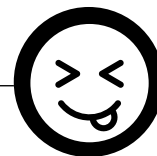
People are questioning the costs and purpose of their habits, which makes them more selective and thoughtful, and more inclined to consume values

Commitment and responsibility are shared by companies and people, with intentions that generate value that goes beyond the purely financial.

The development of deeper connections based on empathy and support will make companies be seen more as a partner than as a mere supplier of products and services.



Bringing
companies and
people closer
together



SOCIALFOOD

Rethink



- ⚡ Different factors constantly redefine the concept of **“value”** for consumers.
- ⚡ Are you sure you know what **“value”** means to your consumers and how you can offer this to them?

BETTER4ME

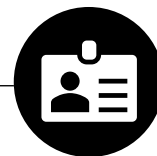
The pandemic has shown that we are all vulnerable and the power of our diet in caring for health. Physical and mental well being is now one of the most powerful drivers in day to day behaviour. With a more proactive and preventive approach, linked to the desire to live longer and better.

New scientific knowledge and technology are driving hyper-personalisation, with real time monitoring of our bodies and smart data processing as a personalised guide to diet and health.

Personalisation represents an enormous challenge: everyone is unique, with their tastes, lifestyles, ethical conditioning, genetic predispositions and dietary needs. The value will be in making us feel unique and supported throughout our life projects.



In search of hyper- personalisation



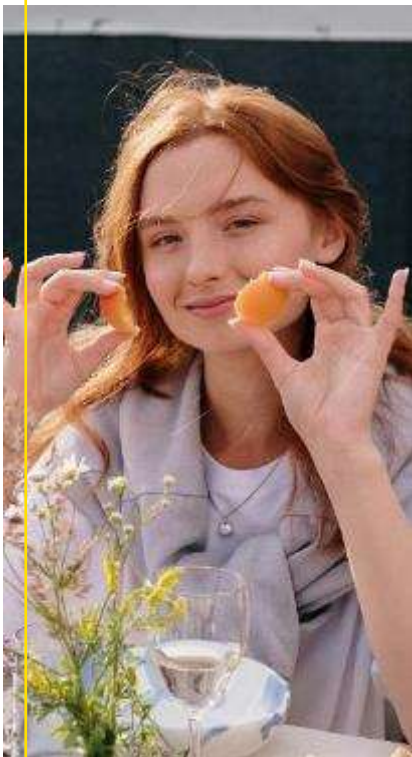
BETTER4ME

Science speaks



Sara Arranz
Food and Health (AZTI)

WE ARE ALL UNIQUE, THE "MAGIC" DIET THAT WORKS FOR EVERYBODY DOESN'T EXIST.



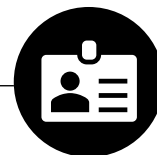
Precision nutrition sets out to adapt a diet to a person's specific needs, based on **scientific evidence** and supported by Artificial Intelligence.



THE NEW DEVELOPMENT

The molecular study of obesity, using **membrane lipidomics** to design new nutritional strategies to prevent and control the disease.

This technique shows us the relationship between diet and health and **we can define what nutrients each person needs and in what proportion** to enable them to function well. The information that membrane lipidomics provides us is being combined with other metabolic data such as microbiota, and with data about dietary habits, preferences, physical activity and psychosocial data.



BETTER4ME

Rethink



- ⚡ What changes do you need to make in the design of new products to ensure that healthy options are more attractive and accessible to all?

EATERTAINMENT

The hedonistic virtues of food are now being extolled more than ever: try new dishes, experiment in the kitchen, interact with people with the same passions or socialise around a good meal.

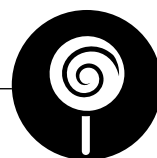
Despite cautious spending, a breach is being opened for small dietary treats.

And there is a wish to escape from the routine of recent years: converting daily experiences such as shopping and preparing meals into fun experiences.

Escape, relax, play and enjoy, in the “real” and virtual world, through authentic experiences that awaken the senses and where instant gratification comes first. Food for the soul.



Authentic experiences



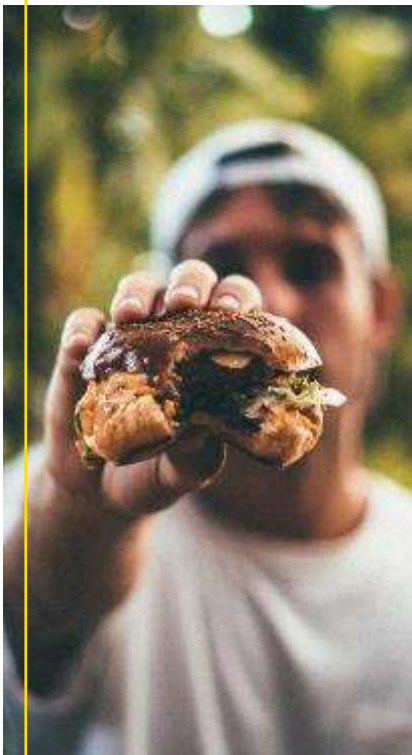
EATERTAINMENT

Science speaks



Clara Talens
New Foods (AZTI)

SCIENCE AND INNOVATION FACILITATE FLEXITARIAN CONSUMPTION



There are major opportunities to develop **hybrid solutions**, that combine animal and plant proteins to combine in one single product the best that meat has to offer (essential amino acids) with the goodness of plant ingredients.



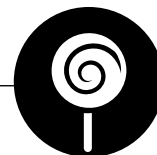
The biggest challenge: achieving sensory quality and desired functionality (appearance, texture and flavour).



When reformulating existing products or creating new ones, the starting point is having ingredients and raw materials with a healthy nutritional profile.

It is important to analyse the potential **impact** of **transformation and conservation processes** on the product's sensory, nutritional and environmental profile. This enables the design of **high quality foods that are sustainable and have a clean label**.

A clear example are **“upcycled” ingredients**, which are not comparable in visual terms, but do provide the same (or even more) nutritional value and flavour. And they require less energy to make.



EATERTAINMENT

SMARTFOOD

Consumers want to feel that they have control over their lives, showing an increasingly self-sufficient and creative attitude to create or access the products and services that they want.

Times of consumption are increasingly flexible. People are looking for better shopping experiences and practical solutions that simplify life and help them to make the best decisions, any time, anywhere.

The growing availability of tools for this area are enabling to feel more and more included: different groups of people can benefit from this new convenience age.



Smart nutrition



SMARTFOOD

Science speaks



Izaskun Pérez and Raquel Rodriguez
New Foods (AZTI)

TECHNOLOGICAL ADVANCES ENABLE LESS TRANSFORMED FOODS TO BE PRODUCED MORE SUSTAINABLY



In response to the needs of consumers and the **snacking**, market, different types of snacks are being developed that use **technological processes** to enable:

- different **textures** to be obtained (crunchy, brittle, spongy...)
- the **nutritional quality** of products to be maintained by replacing processes such as frying.

State of the art food conservation technologies such as high pressure, microwaves and ultrasound are only accessible to complex production lines. The ICT tools linked to **the 4.0 industry** are enabling smaller companies to use new digital channels to sell their products, with services such as **local product**

Short chains, production that is more local and sustainable and less processed products: more rigorous processes backed up by science and the data economy.



SMARTFOOD



2. EATrends Micro

Regenerating food · Try the unexpected

Show me the data

Keep it authentic

Activism on the table

Renewing the mind · My wellbeing, my goal

Eating for fun · Beyond the physical

Eat it your way

Regenerating food

The guilt caused by wasting food and the advances made in circular systems underscore the need for greater responsibility when managing food by-products and making the maximum use of them to create new products.

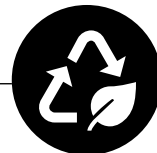
It's no longer just enough to be sustainable. Resource regeneration is the main objective of sustainability. And reclamation is one way of recovering and generating new raw materials.

There are many ways to enter the circular economy. And promoting change through education and awareness raising is essential.

Products made with by-products will have the consumer's blessing if they are of good sensory quality and offer information about the ingredients' origins and their positive impact on the environment.



Zero Waste



SUSTAINFOOD
Regenerating food

Why now?

Greater global awareness of the efficient use of resources and the need to have a resilient and sustainable agro-food sector.

Consumers are starting to accept that their shopping and consumption habits are not the best way to minimise food waste.

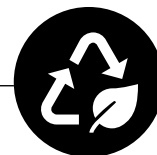
Legislation, policies and financial incentives are driving circular economies in every sector.

New business models that can successfully manage by-products are starting to spring up. And the financial and economic benefits are starting to be seen.

The social impact associated with the creation of new jobs and the improved quality of life caused by the processes in the circular economy are increasingly evident.



Efficient use of resources



SUSTAINFOOD
Regenerating food

In figures

71%

of agro-food companies have an internal strategy to combat food waste

(Report on Food Waste in Industry and Distribution in Spain 2020)

10%

of consumers worldwide are familiar with the concept of food by-products

(Food and Nutrition Sciences, 2021)

80%

of consumers look for this type of product once they understand the concept of “food by-product”

(Food and Nutrition Sciences, 2021)

931 Million Tons.

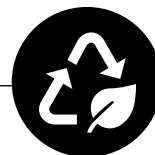
estimated food waste generated worldwide in 2019:

61% homes

26% food services

13% retail sales

(UN Programme for the Environment)



SUSTAINFOOD
Regenerating food

Inspiration

★ Young Henrys (Sidney) craft brewery

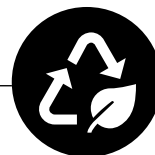
First brewery to use microalgae to capture CO2 produced in fermentation processes and reduce emissions.

★ Recycle Green (India)

Converts waste into a valid currency to buy more than 1000 types of sustainable products.

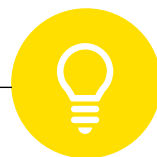
★ Valora Marine Ingredients (Spain)

From fish by-products to high value ingredients for gastronomic bases or functional ingredients for cognitive health, etc.



SUSTAINFOOD
Regenerating food

Opportunities for the food sector



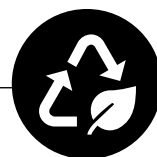
Develop new business models based on the circular economy.

Focus reclamation strategies on obtaining high added value products for human nutrition, cosmetic applications and the pharmaceutical industry.

Form partnerships with others to face the challenges of reclamation (management, logistics, storing by-products...).

Use tracking technologies that enable the origins of ingredients from by-products to be discovered and communicated: this will give your products greater value.

Major multinationals operating in fashion, food and retail are investing in regenerative techniques: join the regenerative movement.



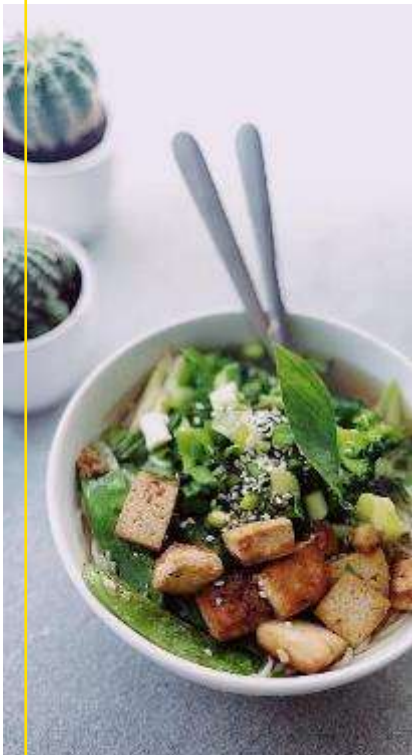
SUSTAINFOOD
Regenerating food

Science speaks



David San Martín
Efficient and Sustainable Processes (AZTI)

CIRCULAR ECONOMY SOLUTIONS TO TRANSFORM OLD FOOD WASTE INTO NEW RAW MATERIALS



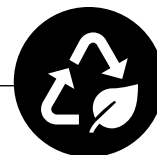
The effective **management** of **food by-products** is a **critical point** in the food industry that can compromise sustainability in the mid term. Developing **new business models** based on the **circular economy** to reclaim food by-products is a key factor in converting this problem into an opportunity.



Obtaining **high-value alternative proteins** for **human nutrition** is a clear example of how this activity generates major **economic, environmental and social benefits**. One of the main challenges in ensuring the viability of reclaiming by-products is having real technological solutions that can reach the market. Only a **multi-stakeholder approach** can work with reclamation



A consumer that is increasingly aware of the efficient, sustainable and safe use of resources will drive **demand** for new products obtained from **by-products**.



SUSTAINFOOD
Regenerating food

Try the unexpected

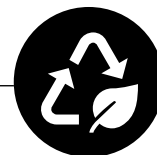
We are witnessing a revolution in alternatives to animal products that offer sensory benefits along with added sustainable, ethical and health factors.

New sources of ingredients and proteins such as fungi and microalgae are leading the way to a promising future where the technological and nutritional challenges of more "traditional" plant proteins can be overcome. And products from cell cultures are gradually becoming a reality in the market.

Proposals for the growing number of vegans, flexitarians and omnivores who share the same wish for different reasons: reduce the consumption of animal protein. A highly dynamic and disruptive market, with a lot of potential to go way beyond meat analogues, and which generate a lot of expectations in consumers who are open to trying new things and innovating. Alternatives that will leave no one unmoved.



It's not what it seems



SUSTAINFOOD
Try the unexpected

Why now?

Consumers are very actively looking for alternative ways to consume protein, based on different reasons: the bad reputation of animal production, overexploitation of resources or food safety.

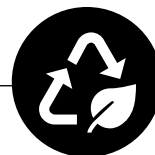
The push given by COVID-19 to healthy eating and sustainable habits has accelerated interest in plant based alternatives.

Alternatives are increasingly accessible to consumers, since mass production is starting to take off and be competitive.

Processes such as fermentation are under the spotlight of many startups, which are looking for ways to economise on time and results, while also exploring new frontiers in taste.



Less animal protein, many reasons



SUSTAINFOOD
Try the unexpected

In figures

431.1 Million euros

Turnover for plant alternatives in Spain.

298.6 million € vegetable drinks
72.2 million € meat substitutes
60.7 million € yoghurt and desserts

(The Green Revolution, Lantern. August 2021)

11%

of the proteins consumed around the world could be alternatives in 2035

(Boston Consulting Group & Blue Horizon)

“I reduce my meat consumption by...

67%

Health

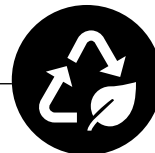
(The Green Revolution, Lantern. August 2021)

34%

Animal welfare

26%

Environmental sustainability



SUSTAINFOOD
Try the unexpected

Inspiration

★ Aqua Cultured Foods

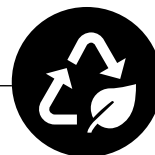
First entire alternative seafood muscle at sushi quality levels created by microbial fermentation.

★ NotCo

Artificial intelligence to find new combinations of plant ingredients to imitate the flavours of animal based products.

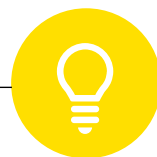
★ Grounded Foods

Uses cauliflower by-products in plant based cheeses.



SUSTAINFOOD
Try the unexpected

Opportunities for the food sector



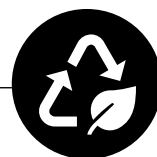
The alternatives market is a good option for diversifying product ranges: there is a lot of demand and a lot to do.

Differentiation is vital in such a competitive market. Newer alternatives such as fish, cheese, eggs and ice creams have more of a market niche.

Sensory and functional aspects are still a challenge waiting to be met. Focus on increasing textures, for example, in fish and seafood alternatives (which at present are mostly coated with breadcrumbs or minced).

Be honest and sincere about the benefits you offer: consumers are starting to question the sustainability of some alternative products.

A lot of animal protein is still consumed in Spain: there is potential for hybrid animal and plant protein alternatives.



SUSTAINFOOD
Try the unexpected

Science speaks



Esther Sanmartín
New Foods (AZTI)

BEYOND PLANT PROTEIN: MYCOPROTEIN, AN ATTRACTIVE PROTEIN ALTERNATIVE



Consumers of alternative proteins to meat wants to **“feel good”** by consuming healthy, sustainable and "clean" products. The food industry is actively looking for more sustainable alternatives to animal based proteins.



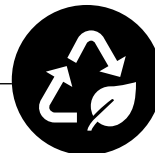
New application for mycoproteins that go beyond meat analogues are being explored. Potential applications include: drinks, snacks, pasta and non-dairy desserts. Fungal protein or mycoprotein has a **high nutritional value and is sustainable** when compared to other protein sources.



The **current challenges** in developing products with mycoproteins:



- Sensory similarity to original products and new product developments
- Improved consumer awareness of the advantages of alternative proteins
- Identification of new strains of interest and optimisation of production processes.



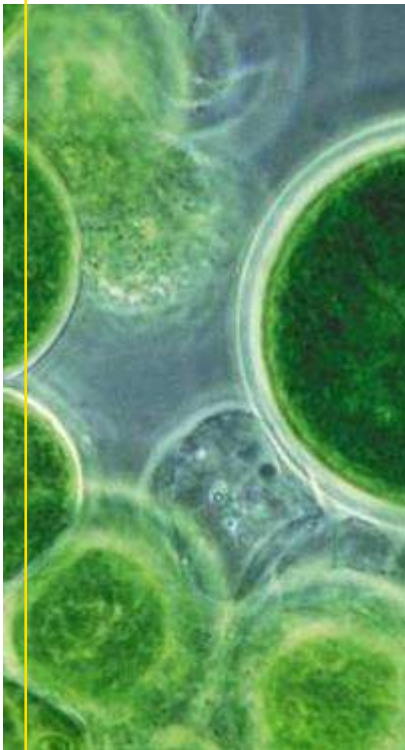
SUSTAINFOOD
Try the unexpected

Science speaks



Marta Cebrián
Efficient and Sustainable Processes (AZTI)

THE PROMISING FUTURE OF MICROALGAE



Microalgae are interesting as **a source of healthy nutrients** and from an **environmental perspective**. They are more often **positioned as super-foods** in the food supplements and diet products market.



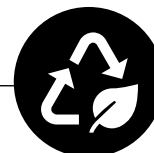
Current world production is **low** to cover the needs of the food industry. And it is still very expensive and **uncompetitive**. But market demands for alternative protein sources, and **positive consumer perceptions** of microalgae, are opening up an attractive **business opportunity** for companies.



Two of the major **challenges** to enable microalgae to reach the market are currently being worked on:



- **reduce the production costs** of microalgae, to multiply productivity.
- improve the product's **digestibility and functional properties** in diet and health.



SUSTAINFOOD
Try the unexpected

Show me the data

Consumers are hungry to know more and need to believe what they are told: have a certain degree of control over what is very often an opaque food chain. Over-information (from the overwhelming ingredients list and labels) or misinformation make informed and correct decision making a difficult process.

Claims about sustainability or functional ingredients now have to prove their worth. Because consumers are looking for validation of marketing messages with metrics: basing promises on facts and proof. Having the right data at the right time is more important than ever: relevant and credible data. And understand them.

Science as a provider of evidence, and the objectivity of technology, will be reliable and essential partners that can offer the credibility and transparency that are so necessary if someone wants to trust a product.



Seeing is believing



TRUST4FOOD
Show me the data

Why now?

Labels are an important decision making tool when shopping. Too many labels, credentials and certificates lead to confusion and misunderstandings. There is a need for harmonisation and data to back up the labels.

All the fanfares for launches of items such as plant based products on the market end up creating confusion and mistrust in consumers.

Having more tools to quantify (the use of environmental resources, the impact of consumption activities, etc.) has increased consumer expectation about measuring their own **“footprint”** and that of the products they consume.

Consumers are more aware and concerned about their digital footprint, and want to have more control over their data: they want access to them and know how they are used.



Measuring the footprint



TRUST4FOOD
Show me the data

In figures

28%

believe that food and drinks that claim specific benefits normally deliver what they promise”

(Mintel, Spain)

9

ways in which the claims of carbon appear on food and drink packaging

(Mintel's Global New Products Database)

72%

can't distinguish between verified green claims and unverified ones”

(OCU, 2021)

46%

pay more attention to environmental claims now than they did 5 years ago”

(OCU, 2021)

+200

environmental labels active in the EU

(European Commission)



TRUST4FOOD
Show me the data

Inspiration

★ FishChoice (Colorado, USA)

Tool for making informed decisions about fish, based on scientific information about risks (possible presence of contaminants) and benefits (nutritional) of consumption.

★ INVISIBLY

Platform where you can design your own algorithm and get points with personal data, which can be swapped for solutions that are adapted to the way you are.

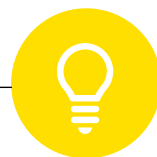
★ ENVIROSCORE

System that offers easy to understand information about the environmental impact of food products.



TRUST4FOOD
Show me the data

Opportunities for the food sector



Make sure your products are transparent and “clean”: messages that are simple and easy to understand and interpret, and only as many as necessary. Help the consumer make simple comparisons and informed buying decisions.

Implement systems to obtain valuable early data about your consumers. And systems to control and protect the data. You could even give them the chance to "monetise" them.

Give value to the information: that can be used in products, services and experiences that you offer them.

Make your activity easily traceable and provide data for you and for your consumers. And provide consumers with access to information that is reliable and relevant to them.



TRUST4FOOD
Show me the data

Science speaks



Saioa Ramos
Efficient and Sustainable Processes (AZTI)

THE FUTURE OF FOOD WILL BE LOCAL, SEASONAL AND PERSONALISED



At a time of increasing solastalgia (a term used to describe the stress caused by environmental degradation) there are more and more consumers who are aware of the need to care for the planet and willing to pay more for products and services with a reduced environmental footprint. At the same time it's important to point out that a **lower environmental footprint does not always mean higher production costs**

“Environmental literacy” is a pending issue. Consumers still find it hard to understand **environmental labelling**, there is a degree of mistrust, and people have not yet received many clear instructions about how to act more sustainably at home, apart from recycling.

We are working on a simple labelling system called **ENVIROSCORE®**, that gives a score for **environmental impact** of products. We think that this is the future: a **unique, validated and certified stamp** that enables people to quickly and simply compare the environmental behaviour of different products at the point of sale and act accordingly, reducing the consumption of less sustainable foods.



TRUST4FOOD
Show me the data

Keep it authentic

Authenticity plays an important role in consumer decisions; an authentic product is what it says it is, and implies trust, quality, truth. Authenticity is often linked to something exclusive to a place.

The origin can make the difference: origin is authentic, genuine, unique, identity. Geographical origins and traceability are key factors in preventing commercial fraud, protecting resources and ensuring food safety.

At a time when trust is at an all time low, proof becomes the main intangible asset for companies. Ensuring that traceability systems and control mechanisms provide accessible and understandable information for consumers is a way to raise the visibility of the work you do to make food production more transparent.



Ready to
show that
you're
unique?



LOCALFOOD
Keep it authentic

Why now?

The pandemic, with all the related trust and supply issues, has increased the wish for more authentic and local products. In the midst of globalisation, the pandemic has forced us to look at what's nearby.

The ongoing prevalence of food fraud has increased scepticism about the authenticity of certain products (“free of”, vegan...).

The growing use of genetic methods in the food sector has helped to ensure geographical origins and product traceability.

Ever more accessible digital tools have provided consumers with ways to carry out their own tracking on where food comes from.



The pandemic has forced us to look at what's nearby



LOCALFOOD
Keep it authentic

In figures

4000 litres

of olive oil incorrectly
labelled as extra virgin
olive oil

(Knowledge Centre for Food Fraud and
Quality. Data Spain 2021)

16 tons

molluscs with false
catch documents

(Knowledge Centre for Food Fraud
and Quality. Data Spain 2021)

63,000

packets of ham and pork
shoulder incorrectly
labelled as “Iberian”

(Knowledge Centre for Food Fraud and
Quality. Data Spain 2021)

68%

Spanish citizens who do not
want to be deceived about
the characteristics of a given
food

(Eurobarometer 2021)

8-12 billion

of euros in damage every year
caused by adulteration of food
for economic reasons (estimate
by the EU)

(Knowledge Centre for Food Fraud and Quality.)



LOCALFOOD
Keep it authentic

Inspiration

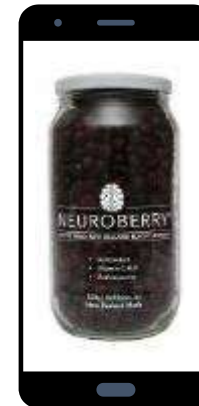
★ Denomination of Origin Idiazabal (Basque Country)

First Denomination of Origin of cheeses in Spain that uses an advanced breed control system based on genetic analysis.



★ Arepa - Neuroberry (New Zealand)

Exclusive blackcurrants of New Zealand with unique local bioactive ingredients and functionality with scientific backup.



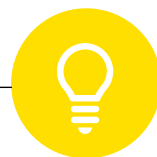
★ Eluceda (UK)

Fast whisky authentication test. Portable E-Sens™ device that enables authenticity to be verification by checking the electrochemical composition.



LOCALFOOD
Keep it authentic

Opportunities for the food sector



Commit to innovative authentication solutions that generate evidence to gain consumer trust and attention.

Invest in process automation and traceability systems in the food chain.

It connects the origins of products and ingredients, with unique characteristics and benefits with scientific backup as a mode of differentiation.

It provides consumers with systems to verify product information throughout the chain: accessible information.



LOCALFOOD
Keep it authentic

Science speaks



Elisa Jiménez
Food Quality and Safety (AZTI)

AUTHENTICITY AND TRACEABILITY: ESSENTIAL TOOLS TO INCREASE TRUST IN THE FOOD SECTOR



Consumers are ever more demanding, and food companies are aware that **problems of authenticity** not only lead to economic losses but also damage the company's image, which in turn has an **impact on sales**.



Fast and easy screening methods based on DNA analysis are being developed to **guarantee the authenticity** of foods.



Examples:

- **Geographical origin** and tracking of aquaculture mussels cultivated in the peninsular Atlantic area.
- **Authentic ingredients** in dishes prepared and processed in distribution
- **Control of unwanted species** in vegan, halal and kosher products.

Transparency, adequate communication of the attributes of **authenticity**, and the integration of data into product **traceability** systems, are key factors in increasing trust and giving greater value to companies that include innovative solutions for verifying authenticity.



LOCALFOOD
Keep it authentic

Activism on the table

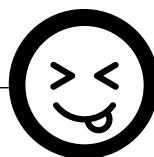
Consumption is the driving force behind change in the food system: buying or not buying a product is a way of “voting” for a set of intangibles. Younger generations feel that they can change things through the decisions they make. Responsible and ethical consumption has become part of the lifestyle, image and personal fulfilment of many people.

Citizens' involvement, expression and collaboration give more voice and power to consumers, to promote better individual and collective decisions and behaviours. The same potential exists in companies.

A collective social activism movement with a common purpose: a better food system. A call to action driven by connectivity that feeds off people's non-conformism, concerns and passion.



Infoodencers for change



SOCIALFOOD
Activism on the table

Why now?

People have more and more tools that help them to track the products that they buy, their habits and the "footprint" they leave behind.

The reassessment of life, values and goals caused by the pandemic has led people to make use of their creative impulses and start on personal projects that more closely match their values as a way of monetising their passions.

The urgency of the climate crisis and the increased visibility of social inequalities has awoken people's interest and concern about the implications of lifestyle and consumption patterns.

The hyper-connectivity driven by the pandemic has increased connections between strangers on common issues, with greater impact, and promoting movements for more collective and more widely distributed change.



Growing aspirations to be creators



SOCIALFOOD
Activism on the table

In figures

46.1%

of consumers have penalised the purchase of products as they regard them as not very sustainable

(Alimarket Sustainability Thermometer, October 2021)

92%

of generation Z and millennials from different countries believe that technology is opening up a new world of co-creation

(Wunderman Thompson, July 2021)

9/10

Spaniards feel that companies that use unjustified sustainability claims should be penalised

(OCU, 2021)

72%

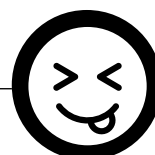
of consumers around the world expect that companies should understand them

(Accenture, June 2021)

84%

worldwide feel they need companies to drive the regeneration of the planet”

(Wunderman Thompson Intelligence, 2021)



SOCIALFOOD
Activism on the table

Inspiration

★ Equity at the Table

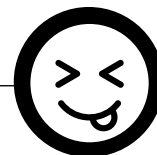
Community that aims to increase visibility of LGBTQ persons, professionals in the food industry.

★ INCREASE project

Citizens' science initiative that sets out to involve people in conserving agricultural diversity of different legumes.

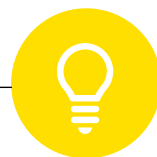
★ Anchor Startup

A platform to empower bakers/confectioners to scale a business.



SOCIALFOOD
Activism on the table

Opportunities for the food sector



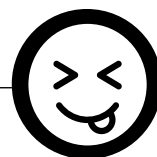
Building a community is essential for attracting people who want to join you and construct collaborative solutions.

The importance of the moment: be flexible and commit to causes that people are fighting for.

Help your consumers with products, services and experiences that respond to this period of profound reassessment caused by the pandemic.

Provide people (your employees, consumers, etc.) with the tools and knowledge they need to reach their most personal objectives and goals.

Companies are jumping onto the chat platforms: use them to build more intimate and personal relationships with your consumers.



SOCIALFOOD
Activism on the table

Rethink



- ⚡ How could you teach or provoke your consumers to make them consider the impact of their consumption behaviours and push them in the right direction?

Renewing the mind

Mental health has been one of the most severely affected areas of human health in the last two years of the pandemic. Stress, exhaustion and loneliness are problems faced by a large part of the population.

Focusing on self-care and mental well being form part of the major renovation of life that many people are seeking. The ultimate aim: achieving more happiness.

People are looking for aware experiences focused on well being, including positive nutrition. Solutions that help to mitigate levels of stress and anxiety, improve quality of life and sleep, have an effect on mood and provide energy and mental clarity.



Recharging the emotional battery



BETTER4ME
Renewing the mind

Why now?

Uncertain times, an increased cost of living, job insecurity... are undermining people's emotional wellbeing, especially amongst young people.

Ever more hectic lifestyles and the difficulties involved in balancing work and family life are weighing us down even more, and often stop us from eating healthily.

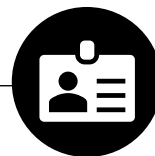
Loneliness and isolation: we are trapped in the paradox of being more digitally connected than ever, but more and more alone. The pandemic has aggravated the social deficit and isolation of many elderly people.

Technology fatigue, solastalgia (eco-anxiety) and the fear of illness all express themselves in episodes of anxiety and depression.

Unhealthy habits and diets (abuse of sugar, erratic meals, etc.) have a direct effect the brain's health.



Erratic meals, impact on the brain



BETTER4ME
Renewing the mind

In figures

6°

global risk for 2022:
mental health

(Davos World Economic Forum)

56%

of consumers believe
that they will be happier
in the next five years

(Euromonitor International, 2021)

50%

worldwide have "totally"
re-evaluated what is really
important in their lives after
COVID-19

(Accenture, June 2021)

21%

of consumers around the
world say that they eat food
that improves their mood and
mental well-being, and young
people are the ones who
most actively seek such
benefits in food

(New Nutrition Business, 2021)

82%

young Europeans who
seek advice about food
to care for their mental
health

(EIT FOOD. Our Food, Our Future. What
Generation Z wants from a healthy food
system, 2021)



BETTER4ME
Renewing the mind

Inspiration

★ Izakaya Yoronotaki Restaurant (Japan)

A set of accessories to heat sake, designed for home consumption... Rituals that create well being.



★ Clutch Cognition (Denmark)

Frothy, caffeine-free energy drink that increases mental performance and helps to counteract fatigue. Based on clinical trials and formulated with botanical ingredients and vitamins C and B5.



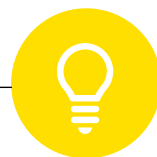
★ A Good Trip - Selfridges (UK)

Selfridges invites its customers to discover their "Superself" and to co-create the future of retail shopping. The first experience to be set in motion consists of some multi-sensory capsules that improve mood, in the form of "psychedelic trips".



BETTER4ME
Renewing the mind

Opportunities for the food sector



Create deeper connections with your customers, use elements of play and highlight the positive aspects in your brand messages.

Positive nutrition: explore the potential of ingredients that strengthen the immune system, improve mood, mental agility or relaxation: botanical, fermented, natural adaptogens and nootropics (turmeric, reishi, ashwagandha, matcha...), etc.

Explore collaborations (with mental health/well being organisations...) to promote changes of behaviour that improve people's well being.

Proven functionality. Offer real solutions; enable consumers to “feel the benefits” that go beyond promises.

Help consumers to include slower and more aware eating in their daily rituals and activities (mindful eating).



BETTER4ME
Renewing the mind

My wellbeing, my goal

Everyone is unique, and therefore people demand solutions that can be adapted as much as possible to their lifestyles, needs and values.

Personalisation is going to be increasingly present in every aspect of our lives, including diet. Precision nutrition sets out to adapt a diet to a person's specific needs, based on scientific evidence and supported by technology.

The focus offered by hyper-personalisation opens up a range of opportunities for innovation and creation of a wide variety of health products geared towards groups with special requirements (persons with food intolerances, vegans, elderly person with difficulties in swallowing...).



Made to measure nutrition



BETTER4ME
My wellbeing, my goal

Why now?

We've all felt more vulnerable during the pandemic. We've taken a more proactive attitude to caring for our health.

Personal growth and cultivating self-esteem are increasingly important. There is a need to feel unique and supported.

Scientific advances and the avalanche of technological development (connectivity, wearables, and above all, artificial intelligence) are enabling much more personalised approaches to be taken to diet and health.

We are now standing on the threshold of what some experts have called **“Netflix for the diet”**, i.e. data intelligence that can offer personalised diet recommendations.



Empowered for self care



BETTER4ME
My wellbeing, my goal

In figures

64%

of consumers believe that well being is the number one priority in general health

(Euromonitor's Voice of the Consumer: Health and Nutrition 2021 survey)

52%

of young people are aware of the importance of a healthy diet and monitor what they eat.

(EIT FOOD. Our Food, Our Future. What Generation Z wants from a healthy food system, 2021)

68%

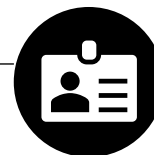
of Spanish consumers say that they have felt more interest over the last 12 months in finding out more about the influence of diet on health (64% in Europe)

(Deloitte, The Conscious Consumer report, August 2021)

29%

of Spanish consumers find fewer new products and 25% do not find products that meet the new needs caused by the pandemic

(6° Barometer of AECOC ShopperView, 2021)



BETTER4ME
My wellbeing, my goal

Inspiration

★ Paname brewing (France)

Aromatherapy infusion to help beer lovers recover the sense of smell lost due to COVID-19. Therapy inspired by studies on the use of familiar aromas to rehabilitate the sense of smell.

★ Sweet Victory (Israel)

Line of chewing gums with a special botanical infusion that holds back the desire to consume sugar for two hours. Blocks the sugar receptors on the tongue, thus giving sweet things an insipid or even sour flavour.

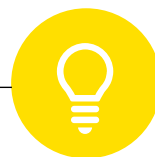
★ Canopi Bloom (UK)

Device for cultivating spirulina at home. A microalgae regarded as a super-food for its health giving properties. You control the growth of the microalgae with a mobile application and know when it is ready for harvesting. Concept in prototype phase.



BETTER4ME
My wellbeing, my goal

Opportunities for the food sector



Learn the secrets of the diets associated with longevity (Mediterranean, blue zone diets...) and adapt your developments to current consumption trends. And remember the saying: “less is more”.

Develop foods with an improved nutritional profile, with health benefits inherent to the ingredients or enriched with scientifically backed compounds. Remember that consumers want to “feel the benefits”.

Make a commitment to precision nutrition and personalise food to each person's needs, preferences and values.

Promote healthy lifestyles and join the transition to healthier and more sustainable dietary systems. Don't just be a food or drink manufacturer.



BETTER4ME
My wellbeing, my goal

Science speaks



Itziar Tueros
Food and Health (AZTI)

PRECISION NUTRITION IS THE FUTURE: INCREASINGLY ACCESSIBLE NON-INVASIVE TOOLS,
BACKED UP BY SCIENTIFIC EVIDENCE



We all respond differently to foods and nutrients. Current nutrition guides do not work because they are too generalist in scope and **diets for specific pathologies** leave even more room for improvement.



One of the ways to work with **precision nutrition** is based on in-depth analyses of the **individual molecular characteristics** (genes, proteins, metabolites and microbiota), which give a lot of information about each person's response to foods. This offers great benefits to users, since they obtain simple **eating guidelines and lifestyle recommendations** that are adjusted to **specific current needs**.



We are specialising in two high priority areas: **obesity and cancer**. We are also looking closely at preventing diet-related diseases.

We are working with **elite sports players**, who have very specific requirements and whose **personalisation demands** are very high.



BETTER4ME
My wellbeing, my goal

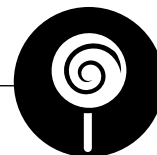
Eating for fun

We are curious by nature; we like new things and delights transmitted through the five senses. And now, more than ever, we want to have fun, live memorable experiences and stop to enjoy the small things that make us feel good

Cultivating our own vegetables at home, taking a break at work to enjoy a comforting snack, listening to music that makes us happy while we cook or trying crazy combinations of ingredients that someone recommended on the social networks are just some of the ways that food can help us.



Mouthfuls of fun



EATERTAINMENT
Eating for fun

Why now?

After a long period of restrictions, we need escapism, pleasure and fun at any time of the day, even during our day to day tasks.

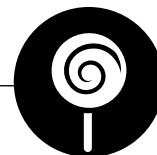
Reconsidering our lifestyles has led many of us to prioritise experiences over material things.

We seek small treats or rewards, and food lends itself perfectly to this need.

The social networks, where people interact with their passions and have fun, are turning into a meeting place for foodies. Food-related content is very popular (especially amongst generation Z and millennials) and invite people to try new sensations.



Experiences, a winning formula



EATERTAINMENT
Eating for fun

In figures

31%

of Spanish consumers want to improve their culinary skills after COVID-19

(kuRunData/Mintel, August 2021)

88%

of consumers think that a balanced diet can include a bit of indulgence (7% more than in 2020)

(Mondelēz International State of snacking 2021 report)

68%

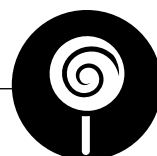
of TikTok users have discovered a brand of food or drink on the platform and 46% have purchased a food product after seeing it

(TikTok, September 2021)

20%

of consumers worldwide mention "a playful experience" as one of the three key factors in being loyal to a brand.

(PwC, June 2021)



EATERTAINMENT
Eating for fun

Inspiration

- ★ Playlist Timer - Barilla (Italy)

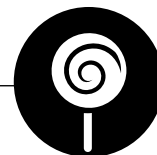
Barilla has partnered with Spotify and presents different types of pasta to music. The “Hip Hop Mixtape Spaguetti” playlist lasts as long as it does to cook a perfect plate of spaghetti (9 min. 3 sec.).

- ★ Clio chocolate-covered Greek yoghurt and granola bar (USA)

Rich in proteins and probiotics and with less sugar. A delicious treat without the guilt.

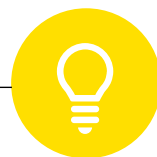
- ★ Lipton bubble tea kit (Australia)

You can make a Sri Lanka black tea with milk and chewy pearls. Creamy, delicious and original.



Opportunities

for the food sector



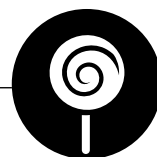
Offer a wider range of sensory experiences. Adventurous flavours, unexpected mixtures of textures, nostalgic products that take us back to the past, immersive restaurants...

Use snackification to offer “guilt-free pleasure”: we love to hear that something delicious is also good for our health.

Help consumers to transform daily tasks into fun activities: culinary aids, ingredients kits+digital cooking classes, playlists for cooking, interactive experiences in shops...

Playful, informal and even childlike approaches can help you interact more with consumers. The social networks can be the perfect channel.

Make consumers participate in your innovations: enable them to try out new products at stores or in digital communities, generate co-creative challenges with rewards...



EATERENTAINMENT
Eating for fun

Beyond the physical

The frontiers between the physical and digital worlds continue to merge. The Internet is evolving at breakneck speed, passing from social networks to virtual worlds, metaverses and augmented digital-physical realities that turn the most mundane activities into a show.

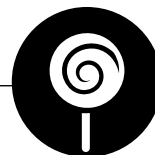
We are witnessing the birth of the metaverse, a virtual world in which users can interact with each other, have fun and even buy and sell products and services.

The diet of the future will be “augmented”, where you can enjoy food in multi.sensory virtual universes.

Immersive retail, virtual showrooms and “buyable” experiences (physical and virtual)... are new ways to create unique brand experiences for customers.



On the threshold of the food metaverse?



EATERTAINMENT
Beyond the physical

Why now?

Artificial intelligence, extended reality, algorithms...are creating immersive universes that have an impact on different aspects of life.

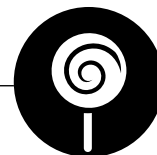
The accelerated adoption of technology has enabled new more hybrid ways of life, work and shopping to appear. People are looking for interactivity, flexibility and immersive experiences.

People are increasingly seeking refuge in digital spaces, where they can be their real selves (or their avatar) and where they can interact in “micro-communities”.

The new hybrid reality (phygical) is in the DNA of young people. In the meantime, older people are getting familiar with technology, feeling more at ease with it and more empowered to make purchases and consume digital services.



Hybrid ways of life



EATERTAINMENT
Beyond the physical

In figures

81%

feel that the digital presence of brands is as important as the physical one

(Wunderman Thompson, September 2021)

66%

prefer to interact digitally with a brand

(Wunderman Thompson, September 2021)

22%

of Spanish people will change their daily activities to online in the next 5 years.

(Euromonitor Voice of the Consumer: Lifestyles Survey 2021)

10%

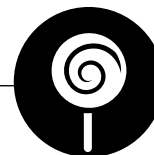
of Spanish consumers (16 % worldwide) use virtual or augmented reality at least once a week to improve their buying experience

(Euromonitor Voice of the Consumer: Lifestyles Survey 2021)

70%

of the major brands will be in the metaverse in five year's time and investment in the metaverse will multiply by ten in 2022, partly because of the boom in cryptocurrencies

(Wildbytes, 2021)



EATERTAINMENT
Beyond the physical

Inspiration

★ Bogega CARO (Argentina)

Offers live virtual tours via Amazon Explore. Wine lovers can enjoy a personalised visit to a live streamed wine cellar while sitting in the comfort of their own home.



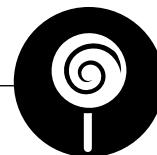
★ Plastic Reality of the Mexican Corona company

Enables you to immerse yourself in an augmented reality experience to calculate and see each person's yearly plastic footprint.

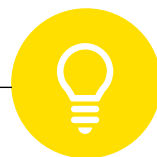


★ Bored Breakfast Club

Community of coffee lovers in the metaverse that offers exclusive access to events, discounts and deliveries of Yes Plz toasted coffee free to club members, holders of NFTs (token non fungible tokens).



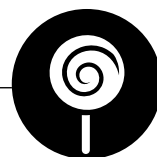
Opportunities for the food sector



Add playful elements in the real and virtual worlds and explore the opportunities that the metaverse offers in the world of food.

Augmented reality (AR), virtual reality (VR) and mixed reality (RM) can help you to interact with your customers, and offers a lot more than entertainment: support in the kitchen, education about healthy and sustainable eating, virtual visits, improved shopping experiences...

Join the gamer movement, go beyond sponsorship and become part of the gaming experience. There are many gamers in the virtual worlds who want to interact with food and drink brands and products.



EATERTAINMENT
Beyond the physical

Eat it your way

There is growing interest in smart solutions that can adapt to our ways of life, help us to do the shopping and save time.

The search for practicality, the desire for immediacy, and personalisation are things that guide our lives. Simplicity is needed in such a complex environment. Everything that makes life easier is welcome: on-the-go recommendations, apps to manage shopping lists, multi-purchase collection lockers...

The concept of extreme convenience is the prelude for what we know as smart cities and homes: everything you need in less than a 15 minute walk, hyperlocal deliveries, "zero contact" shops, robotics in restaurants, connected fridges that minimise food waste...



Smart time management



SMARTFOOD
Eat it your way

Why now?

Modern lifestyles, changes in family dynamics, more flexible consumption habits, greater demands for autonomy... have increased demands for comfortable, health and affordable solutions for daily meals.

Multi-channel, connectivity and the data economy are enabling improved purchasing and consumption experiences to be offered.

Although the home continues to be the centre for consumption for many people, there is also a greater desire for interpersonal connections. One feature of the enormous range of perceptions about the meaning of convenience right now is the hybrid business model that sets out to offer consumers the experience they want.



Flexibility for the return to “normality”



SMARTFOOD
Eat it your way

In figures

82%

of Spanish shoppers are concerned about the rising prices of their daily purchases

(Deloitte Consumer tracker, 1 February 2022)

41%

of Spanish millennials use their phone to buy things online, 48% to monitor their health and 47% to pay at a shop at least once a week.

(Euromonitor Voice of the Consumer: Lifestyles Survey 2021)

+65%

of consumers over 60 years of age are looking for ways to simplify their lives (easy to use devices, training and support to use digital solutions)

(Euromonitor International, 2021)

80%

of professionals feel that exploring new business models (e.g. marketplaces or direct to consumer) is a strategic priority for their company in the next 12 months

(Euromonitor International, 2021)



SMARTFOOD
Eat it your way

Inspiration

★ MEALHERO (Belgium)

Personalised healthy meal kits made with “preconditioned” and frozen ingredients, to cook at home in less than one minute with a smart steamer that cooks the products exactly according to the chef's recipe.

★ Vahaa Smart Garden

A combination of hydroponics and Internet of Things (IoT) provides you with a smart garden to access healthy, fresh and sustainable food no matter where you live.

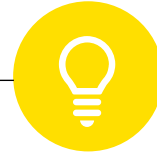
★ Sunions (USA)

New sweeter and smoother tasting variety of onion that doesn't make your eyes water when you cut it. For people who want convenience when they cook, where the type/format of vegetable is important.



SMARTFOOD
Eat it your way

Opportunities for the food sector



Be receptive and provide a fluid and smooth experience. Think about innovations that can make daily life easier or relieve the “consumer’s pain trigger points”, like savings in the shopping basket..

Get your customers to see you as a “shopping and nutrition coach” or as an effective problem solver for their on-the-go eating needs.

Embrace the new technologies to offer new improved shopping experiences on the fly or at the store: facial recognition, contactless payments, assistant voice guides, robots guides in stores, applications that compare products...

Think about practical and more indulgent food solutions for new consumption moments at home: healthy snacking, meal accompaniments, subscription models...



SMARTFOOD
Eat it your way



3. Science

Connecting science to consumer needs

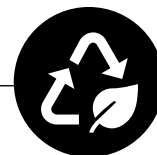
Science is playing a leading role as a generator of knowledge and evidence for the growing thirst for consumer data, solutions for the processing industry and for new disruptive businesses in the food sector.

It is also a source of trust for the consumer. And an increasingly necessary workmate for innovative companies that want to progress in areas such as personalised nutrition or developing new products that more closely match consumers' changing needs through technology or the inclusion of new ingredients.



Using science to redesign food

Benchmark projects linked to EATrends



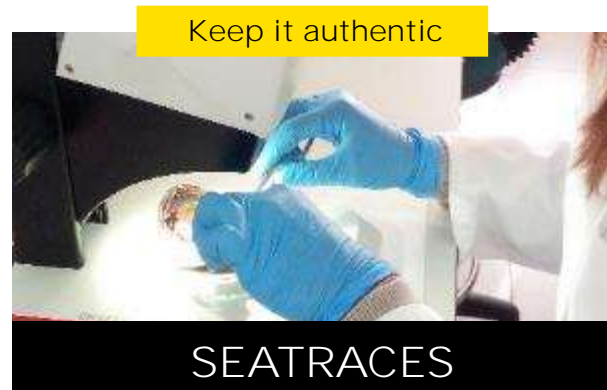
SUSTAINFOOD

Benchmark projects linked to EATrends



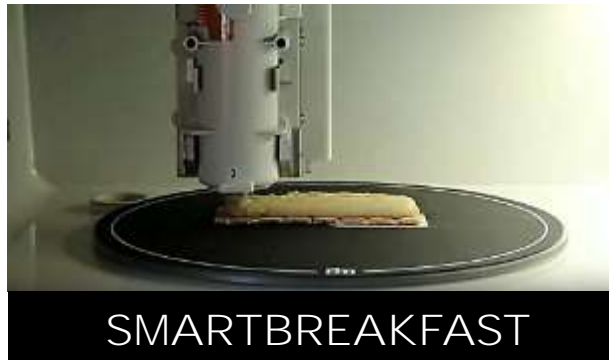
TRUST4FOOD

Benchmark projects linked to EATrends



LOCALFOOD

Benchmark projects linked to EATrends



SMARTFOOD

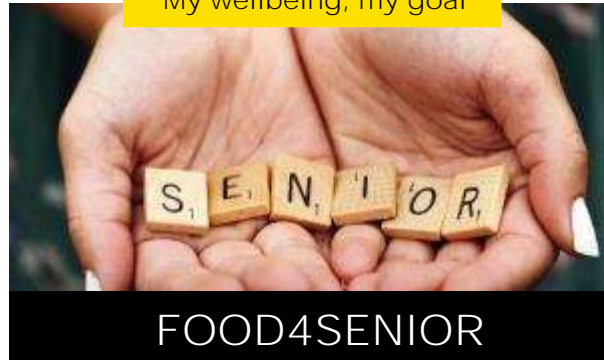
Benchmark projects linked to EATrends

My wellbeing, my goal



UNDERPRESSURE

My wellbeing, my goal

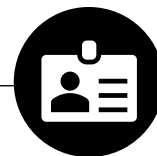


FOOD4SENIOR

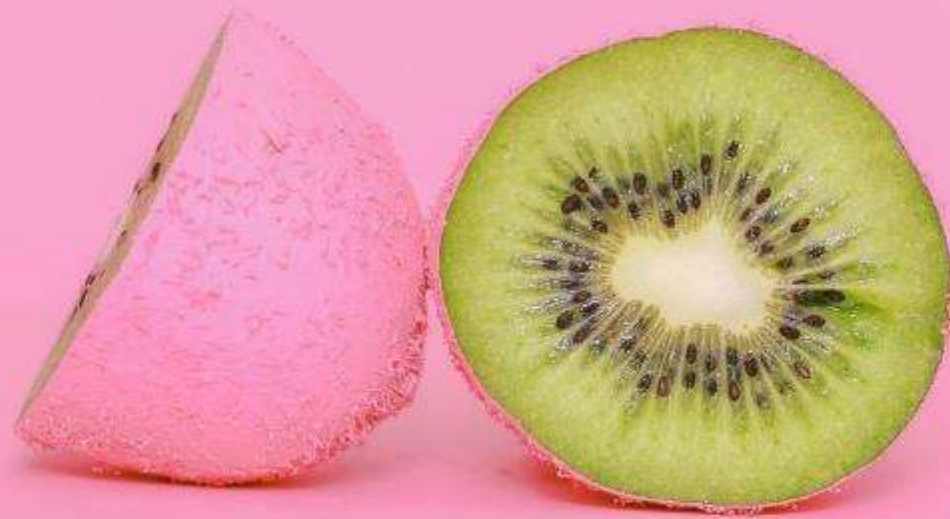
My wellbeing, my goal



ONCOFOOD



BETTER4ME



Hungry for more?

AZTI helps you to connect with the consumer

Need a hand to more effectively align your business with changing consumer demands?

We can drive your innovation with our scientific-technological knowledge and skills to help the consumer and develop new food company products and business models.

Get in touch with us if you're interested in finding out more about what we can do for you!

 AZTInnova@azti.es

More key reports about food innovation at:

 www.azti.es/aztinnova/informes/



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