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THE
MANAGEMENT

MAUDE
STUDIO



MIND-SHIFTING TO THE NEW ERA



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INTRODUCTION

Mind-Shifting to the New Era: From Food Tradition to Protein Transition

Across Europe, a quiet but profound transformation is underway—one that challenges not only how we eat, but how we think, innovate, and sustain our collective future. This transformation is not solely about food; it is about systems, values, identity, and resilience. At the heart of this evolution lies a simple yet provocative idea: the introduction of insect-based ingredients into European gastronomy—not as novelties, but as legitimate, culturally integrated, and environmentally strategic components of the food system.

The integrated research presented in this report, *Mind-Shifting to the New Era*, draws on national studies from six countries—Cyprus, Greece, Italy, Romania, Spain, and Turkey—that together represent a mosaic of culinary heritage, market readiness, and societal attitudes. Through a structured analysis of professional and consumer perceptions, statistical insights, and contextual narratives, this report offers a unique, multidimensional view into one of the most complex and promising shifts in contemporary gastronomy.

Why Insects, Why Now?

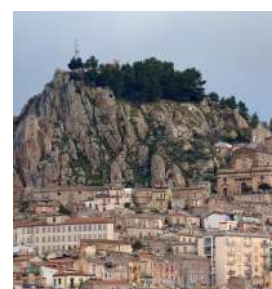
The case for edible insects has been made in scientific, environmental, and nutritional circles for over a decade. Insects are high in protein, low in environmental impact, and can be farmed using minimal land, water, and feed. They contribute to circular economy principles by converting organic waste into high-value protein and fertilizer. Several insect species have been approved under the EU Novel Foods Regulation, and interest from the private sector is growing steadily.

But the core challenge has never been technical. It has always been psychological, cultural, and communicational. Changing food systems requires more than approvals and data—it requires mind-shifting: a deliberate, trust-based process through which societies learn to accept what was previously unimaginable, and to reframe it as desirable, even familiar.

This report is not simply about insects. It is about how Europeans think about food, about what counts as “normal,” and how change is seeded—not imposed—into deeply rooted culinary identities.

A Converging Landscape of Policy and Culture

The European Green Deal, the Farm to Fork Strategy, the EU Protein Plan, and the Circular Economy Action Plan together form a policy ecosystem designed to radically reshape the continent’s food system by 2050. These strategies are not optional—they are structural imperatives responding to climate change, biodiversity



loss, land degradation, and global food security risks.

In this context, edible insects are no longer fringe elements. They are:

- An environmentally sound protein alternative aligned with the EU's goals of reducing emissions and resource dependency.
- A circular solution that helps close food production loops.
- A pedagogical tool for teaching food system sustainability in vocational education and training (VET).
- A business opportunity for chefs, entrepreneurs, and food innovators across Europe's rural and urban economies.

Yet, for all their strategic relevance, insects remain culturally sensitive. They challenge long-held beliefs about what is edible, what is tasteful, and what is dignified on the plate. Hence, the journey toward adoption must be navigated with cultural literacy, culinary creativity, and stakeholder collaboration—not just legislation and market mechanisms.

About This Report: A Multi-Country Behavioral Exploration

This document brings together six national validation reports developed under the Insects Innovation in Gastronomy project. Each national report explores how professionals and consumers in their respective countries evaluate a common set of 14 operational guidelines intended to facilitate the adoption of insect-based gastronomy in professional kitchens, educational programs, and hospitality menus.

The countries—Cyprus, Greece, Italy, Romania, Spain, and Turkey—were chosen for their culinary diversity, geographic spread and cultural variability. The findings combine:

- Quantitative analysis of three key dimensions: credibility, attitude change, and intention to try/adopt (for consumers), or feasibility, efficacy, and intention to apply (for professionals).
- Narrative interpretations of cultural, historical, regulatory, and media contexts that shape food attitudes.
- Strategic recommendations tailored to national dynamics and European alignment opportunities.

What emerges is not a simple comparison between countries—but a dynamic portrait of how shared European values intersect with national food traditions and local readiness levels.

What We Found: Patterns Across Borders

Despite the wide variation in culinary histories: from the experimental fine dining scenes of Spain to the deeply conservative rural kitchens of Romania, a series of cross-cutting themes echo across all six countries:

1. Trust Is the Gateway

Consumers across all countries responded positively when guidelines were delivered with credibility—whether through chefs, institutions, or labeling. In many cases, credibility strongly predicted willingness to try, highlighting the power of trusted messengers.

2. Chefs Are Cultural Catalysts

In every national report, chef-led storytelling emerged as one of the most effective drivers of behavior change. Chefs are not just technicians—they are cultural ambassadors who carry enormous symbolic capital in shaping

new norms.

3.Subtle Integration Works Best

Guidelines emphasizing familiar formats—such as bread, pasta, sauces, or fillings—consistently scored higher than those promoting whole insects or radical product innovation. The message is clear: introduce novelty through the comfort of the familiar.

4.Urban Centers Lead the Way

Culinary innovation tends to cluster in urban, international, and younger audiences, where exposure to global food trends, sustainability narratives, and experimental menus is more common. These hubs represent ideal starting points for pilots and campaigns.

5.Media Framing Shapes Perception

In countries where insect-based foods are still framed as exotic or shocking, consumer attitudes remain more hesitant. When presented through sustainability and gastronomy lenses, perceptions shift. This underlines the importance of strategic communication and normalization in mainstream media and VET channels.

From Fragmentation to Shared Transformation

The six countries profiled in this report each face unique cultural and logistical challenges. But what unites them is the beginning of a mindset shift—one that aligns culinary identity with climate responsibility, and innovation with heritage.

In Cyprus, statistical uniformity reflects a blank-slate opportunity. In Greece and Spain, professional enthusiasm is high and chefs are ready to lead. In Italy, the gap between belief and behavior can be bridged through exposure and operational support. Romania and Turkey, with their strong traditions and emerging urban markets, are poised for carefully curated integration efforts.

Rather than isolated initiatives, these country efforts should be seen as mutually reinforcing pathways toward a continental vision of gastronomic sustainability—grounded in diversity, propelled by education, and accelerated by trust.

As we embark on this journey, let us remember: true sustainability is not a checklist—it is a cultural commitment. And mind-shifting, in this context, is not about erasing tradition—it is about expanding it to meet the challenges of our time.

Welcome to the New Era!



COUNTRY PORTRAIT: SPAIN



SPAIN

Spain stands at a pivotal moment in its gastronomic evolution. Renowned for blending centuries-old culinary traditions with cutting-edge innovation, the country has the cultural depth, professional expertise, and public visibility to lead Europe's transition toward sustainable gastronomy. The results of the national validation study on the Insects Innovation in Gastronomy guidelines reveal a professional community that is not merely receptive to change, but strategically positioned to implement it with both confidence and creativity.

In Spain, the survey findings show consistently high ratings for feasibility, intention to apply, and perceived efficacy across all 14 operational guidelines. This indicates that Spanish chefs, food entrepreneurs, and hospitality professionals see insect-based gastronomy not as a passing trend or abstract sustainability goal, but as a viable, market-ready opportunity. Unlike in some other national contexts where enthusiasm is tempered by skepticism, Spanish professionals demonstrate a remarkable alignment: when they believe a guideline works, they are ready to act on it.

This report integrates quantitative insights with cultural and economic context to provide a holistic view of Spain's readiness to embrace the future of food. It examines Spain's unique gastronomic ecosystem, identifies key opportunities and barriers, situates the country's efforts within the wider European sustainability agenda, and proposes strategic actions to ensure Spain emerges as a leader when it comes to Mind-Shifting to the New Era.



Spain in the Context of Sustainable Gastronomy

Cultural Attitudes

Food in Spain is not simply a matter of sustenance; it is an expression of identity, regional pride, and social connection. Meals are often shared, unhurried experiences, built around seasonal ingredients and deeply rooted culinary traditions. From the ritual of tapas in Andalusia to the elaborate seafood feasts of Galicia, the emotional link between food, place, and heritage is profound.

Yet, Spain's culinary history is also one of continuous evolution. Its cuisine reflects centuries of cultural exchange: Moorish agricultural techniques and spices, New World products like tomatoes and peppers, Mediterranean olive oil traditions, and modernist innovations pioneered by figures such as Ferran Adrià and the Basque Culinary Center. Change has historically entered Spanish kitchens through trusted channels — integrated into familiar formats, championed by respected chefs, and aligned with regional narratives.

Today, insect-based foods occupy no established role in the Spanish public imagination. When they do appear in media, they are often framed as eccentric novelties rather than as credible, sustainable protein sources. However, Spain's openness to culinary experimentation — particularly in gastronomic hubs like Madrid, Barcelona, Valencia, and San Sebastián — suggests that with the right framing and champions, new ingredients can move from curiosity to acceptance.

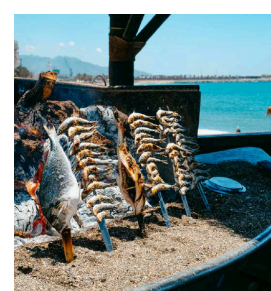
Sustainability Discourse

Spain's sustainability conversation has gained significant momentum in the last decade, driven by both grassroots activism and institutional policy. National and local initiatives have focused on:

- Expanding organic farming and certification schemes.
- Promoting farmers' markets and short supply chains, particularly in rural revitalization programs.
- Implementing food waste reduction campaigns at municipal and hospitality levels.
- Encouraging plastic reduction and improved recycling systems.

However, much like in other European contexts, public understanding of sustainability often centers on visible, tangible actions — such as avoiding single-use plastics or buying locally — rather than engaging with the deeper systemic shifts needed in food production and consumption. The role of alternative proteins, including insects, remains largely absent from mainstream debate.

This absence presents a dual reality: a barrier, because no established narrative exists to normalize insect consumption; and an opportunity, because public perception can be shaped from scratch. Linking insect protein to familiar values — innovation in agriculture, culinary creativity, climate resilience, and health — could make Spain



an early adopter in the European sustainable protein movement.

As a member of the European Union, Spain is directly influenced by evolving EU regulations on novel foods, sustainability labeling, and agricultural innovation. The alignment of national gastronomic ambition with EU sustainability goals could accelerate the acceptance of insect-based foods, particularly if professional culinary leadership takes an active role in reframing them from exotic novelty to forward-looking necessity.

Statistical Insights – What the Data Reveals

The Spanish data tells the story of a country where tradition and innovation coexist in a delicate, often beautiful balance. Both hospitality professionals and consumers reveal themselves as open to new gastronomic ideas — but only when these ideas are presented through the prism of Spain’s rich culinary identity and social food culture.

Among hospitality professionals, the guidelines that scored highest were those that introduced insect proteins subtly, framed not as a disruption but as a natural evolution of existing dishes. When incorporated into familiar preparations — a crusty pan de masa madre, a silky croqueta, or a saffron-infused sauce draped over seafood — insect-based ingredients ceased to feel alien. In these contexts, professionals rated such approaches highly for both feasibility and persuasiveness, and many indicated a strong likelihood of experimenting with them in their kitchens.

This reflects a core truth of Spanish gastronomy: new elements are best accepted when they amplify the sensory pleasure of a dish without altering its cultural essence.

Another strong signal from the professional dataset was the importance of culinary authority and storytelling. In Spain, chefs often function as cultural ambassadors, and their influence extends beyond restaurants into television, publishing, and social media. When respondents imagined a renowned Spanish chef — perhaps from the Basque Culinary Center or a Michelin-starred kitchen — introducing insect-based recipes framed within a narrative of sustainability, terroir, and innovation, their openness increased dramatically. This mirrors Spain’s adoption of other trends, from the molecular gastronomy wave of the 2000s to the farm-to-table renaissance, which entered the mainstream through chef-led advocacy and gastronomic storytelling.

On the consumer side, the data revealed a powerful alignment between credibility, attitude change, and willingness to try. The correlations between these metrics were notably high, suggesting that in Spain, once a message is perceived as credible, the psychological leap from curiosity to action is relatively short. Credibility here is not an abstract concept — it is anchored in trustworthy sources, clear communication, and visible authenticity. For Spanish consumers, the guidelines that proved most persuasive combined familiarity with transparency. Open ingredient labeling, clarity on sourcing, and the integration of recognizable Spanish flavors — think pimentón de la Vera, Manchego cheese, or extra virgin olive oil — significantly increased receptivity. When insect-based ingredients were paired with these flavor anchors, the idea shifted from “eating something foreign” to “rediscovering a cherished taste in a new form.”

Interestingly, both consumers and professionals shared a common reliance on trust and culinary familiarity as decision-making drivers. For professionals, trust was built through the promise of training, reliable suppliers, and clear EU-aligned regulations to safeguard quality and safety. For consumers, trust was earned through visible transparency, chef endorsements, and the sense that insect-based dishes were a logical extension of Spain’s culinary heritage rather than an imposition from outside.



A notable Spanish trait emerging from the data is the speed of behavioral transition once credibility is established. In some markets, positive perception lingers in the realm of theory; in Spain, belief tends to move quickly toward action, especially when reinforced by strong social cues — whether a respected chef, a trusted brand, or a vibrant media narrative.

Ultimately, the statistics do not depict Spain as uniformly resistant to insect-based gastronomy. Rather, they reveal a market that thrives on culinary pride, social eating rituals, and sensory pleasure — a market willing to embrace innovation if it is wrapped in the language of tradition, championed by familiar voices, and served in the convivial spirit that defines the Spanish table.

National Barriers & Opportunities

Spain's pathway toward integrating insect-based gastronomy unfolds at the intersection of culinary pride, market innovation, and shifting sustainability narratives. To chart a realistic course, it is essential to recognize the cultural and structural barriers while identifying the unique advantages Spain holds in the European and global context.

Barriers to Adoption

1. Deep Culinary Traditions and Emotional Attachment to Familiarity

Spanish gastronomy is a cornerstone of national identity, shaped by centuries of regional diversity — from the rustic stews of Castile to the seafood-rich mariscadas of Galicia and the avant-garde creations of Catalonia's culinary vanguard. This richness, while a source of national pride, also means that the introduction of entirely new protein sources like insects faces the challenge of competing against a deeply ingrained repertoire of flavors and formats. For many Spaniards, the idea of consuming insects triggers an initial reflex of skepticism, as it does not align with their collective image of the Mediterranean diet or the convivial tapas culture.

2. Limited Market Presence and Public Exposure

Although the European Union has approved several insect species for human consumption, insect-based products remain a niche category in Spanish retail. Their presence is mostly confined to specialty shops, online vendors, or experimental restaurant menus in major cities. This scarcity of exposure keeps the concept on the fringes of public consciousness, making it harder for consumers to see such products as a viable everyday option. Professionals in the hospitality sector face a similar challenge — without consistent access to suppliers or case studies, integrating these ingredients into mainstream menus remains a theoretical exercise rather than a practical possibility.

3. Knowledge Gaps and Misconceptions

While Spain's public discourse on sustainability is growing, awareness of edible insects as a sustainable protein source is minimal. The association of insects with novelty or shock value, often perpetuated by sensationalist media, reinforces misconceptions about their safety, taste, and nutritional value. Without targeted education and credible endorsements, these narratives can easily overshadow factual information.

4. Navigating Regulatory and Consumer Trust Issues

Spain, as an EU member, follows EFSA (European Food Safety Authority) guidelines for novel foods, including insects. While this provides a clear regulatory framework, the approval process can be slow, and compliance requirements may deter small producers. Moreover, for the average consumer, regulatory approval alone does not

translate into trust — they require visible quality assurance, transparent sourcing, and trusted intermediaries such as chefs, nutritionists, or reputable brands.

5. Perceived Conflict with the Mediterranean Diet Narrative

The Mediterranean diet is internationally recognized as one of the healthiest eating patterns, and Spain actively promotes it as a cultural and health export. For some, the inclusion of insect-based ingredients may appear to conflict with this narrative unless carefully positioned as a complementary rather than competing protein source.

Opportunities for Growth

v1. Culinary Creativity as a National Asset

Spain's gastronomic sector is world-renowned for its capacity to blend tradition with innovation. From Ferran Adrià's molecular gastronomy to the global success of Basque pintxos, Spanish chefs have a proven ability to redefine culinary boundaries while keeping them rooted in cultural authenticity. This creative legacy positions Spain perfectly to develop insect-based dishes that feel exciting yet familiar — think croquetas with cricket protein, paella enhanced with insect-based broths, or turrón enriched with sustainable proteins.

2. Sustainability as a Growing Public Priority

Climate change, water scarcity, and agricultural sustainability are increasingly part of Spain's public conversation, especially in regions affected by prolonged droughts. The Spanish government and private sector have invested in campaigns promoting food waste reduction, local sourcing, and circular economy principles. By framing insect protein as a solution within this urgent sustainability narrative — not as an isolated novelty — stakeholders can tap into existing public concern and action.

3. Tourism as a Cultural and Culinary Testbed

As one of the world's top tourism destinations, Spain has a unique platform to introduce insect-based gastronomy in a controlled, premium context. High-end restaurants, culinary festivals, and gastronomic tourism hubs like San Sebastián, Barcelona, and Madrid can serve as “first-contact” spaces for both domestic and international audiences. Positive experiences in these settings can seed acceptance that eventually filters into the mainstream.

4. EU Alignment and First-Mover Potential

Spain's full integration into the EU's regulatory and funding ecosystem offers access to innovation grants, sustainability programs, and cross-border partnerships. By becoming an early adopter of edible insect integration — particularly in the Mediterranean region — Spain could position itself as a leader in sustainable gastronomy, exporting both products and expertise.

5. Expanding Health and Wellness Markets

Spain's fitness, sports nutrition, and functional foods sectors are growing rapidly. Insect-based protein products — whether as supplements, snack bars, or fortified baked goods — could find an easier entry here than in traditional culinary contexts, as these consumers are often more willing to experiment for performance and wellness benefits. This could create a parallel pathway for normalization outside of mainstream dining.

Alignment with European Strategies

Spain's progression toward integrating insect-based gastronomy is not happening in isolation. As a full member of the European Union, the country's food system is shaped — and increasingly guided — by the EU's comprehensive sustainability, food security, and innovation agendas. Understanding these strategic alignments is key to situating Spain within the broader European shift toward diversified, low-impact protein sources.



1. European Green Deal and Farm to Fork Strategy

The EU's Farm to Fork Strategy — a central pillar of the European Green Deal — explicitly targets the transformation of the food system to make it healthier, more sustainable, and more resilient. Within this framework, edible insects are recognized as a legitimate alternative protein source capable of reducing the environmental footprint of animal agriculture. For Spain, whose agricultural sector faces mounting pressure from climate change (notably water scarcity and soil degradation), the integration of insect protein aligns perfectly with the EU's dual objective: reducing reliance on resource-intensive proteins while sustaining rural livelihoods through diversification.

2. Novel Foods Regulation (EU) 2015/2283

The European Food Safety Authority (EFSA) has already approved several insect species for human consumption under the Novel Foods Regulation. Spain benefits from being part of this harmonized regulatory framework, which ensures that products meeting EU safety and quality standards can be marketed across the entire single market. This not only reduces legal uncertainty for producers but also opens export potential to other EU member states. Spain's strong food manufacturing infrastructure could be leveraged to become a regional hub for insect-based product development, provided stakeholders act early.

3. Horizon Europe and Research Synergies

Through Horizon Europe, the EU actively funds research and innovation projects that explore sustainable proteins, including insects. Spanish universities, research institutes, and agri-food companies have a strong track record in securing such funding — from aquaculture feed innovation to plant-based protein research. By integrating insect protein into this portfolio, Spain can secure both scientific leadership and industrial capacity, ensuring that knowledge generated locally translates into commercially viable products.

4. Common Agricultural Policy (CAP) Modernization

The reformed Common Agricultural Policy places increased emphasis on sustainability, biodiversity, and rural development. Insect farming, with its low land and water requirements, offers opportunities for rural diversification, especially in regions where traditional agriculture is under threat from climate change. Spain could use CAP's eco-scheme incentives to encourage small-scale insect farming cooperatives, creating new income streams in vulnerable rural communities.

5. European Protein Strategy and Resilience Goals

The EU's emerging protein strategy addresses Europe's dependency on imported protein sources. By fostering domestic insect production, Spain could contribute to reducing this dependency while strengthening its own food resilience. This is particularly relevant in light of global supply chain disruptions, where local, scalable protein production can become a strategic advantage.

6. Mediterranean Leadership in Sustainable Diets

As one of the principal custodians of the Mediterranean diet — itself recognized by UNESCO as intangible cultural heritage — Spain has an influential voice in shaping how sustainability and tradition can coexist. By aligning insect protein integration with Mediterranean principles (plant-forward meals, seasonal produce, moderate but high-quality animal protein), Spain can present itself as a leader in redefining sustainable diets for the region, inspiring both EU peers and neighboring Mediterranean countries.

Strategic Recommendations for Spain

To translate the insights from this study into concrete action, Spain must approach insect-based gastronomy not as a novelty but as a strategic pillar of sustainable food transformation. The following recommendations are designed to bridge the gap between current perceptions and large-scale adoption, ensuring alignment with both national priorities and European ambitions.

1. Embed Insect Protein into Familiar Culinary Formats

Spanish cuisine's strength lies in its deeply rooted traditions and regional diversity — from Andalusian gazpacho to Basque pintxos and Catalan suquets. Instead of introducing insect-based foods as stand-alone, unfamiliar products, they should be subtly incorporated into beloved staples. Imagine protein-enriched flour for tortilla de patatas, insect-fortified croquetas, or chorizo blends with partial insect protein substitution. By preserving the sensory identity of these dishes, chefs can make the transition feel like a culinary evolution rather than a cultural disruption.

2. Empower Chef-Led Storytelling and Gastronomic Ambassadors

Spain's culinary identity is inseparable from its chefs, many of whom enjoy global influence. Leveraging these figures as ambassadors could fast-track acceptance. High-profile chefs — from avant-garde innovators to respected regional guardians of tradition — should be involved in co-creating and presenting insect-based dishes in a narrative that ties innovation to heritage. Cooking shows, gastronomy congresses, and fine dining experiences could serve as controlled environments to showcase this integration before scaling it to mainstream markets.

3. Harness Tourism as a Catalyst for Early Adoption

Tourism represents a massive opportunity to introduce insect gastronomy in a low-risk, high-impact setting. With over 80 million annual visitors, Spain can pilot insect-based menus in tourist-heavy areas, particularly in experiential dining venues, boutique hotels, and food festivals. These early adopters — both domestic and international — can help normalize the idea and act as cultural ambassadors when returning to their home countries.

4. Leverage Sustainability and Health Narratives

The Spanish public has shown increasing interest in sustainability, but the narrative needs to connect directly to personal and national priorities. Campaigns should emphasize the reduced environmental footprint of insect protein, its nutritional advantages (high protein, low fat, rich in micronutrients), and its role in safeguarding Spain's food future amid climate pressures. Pairing these facts with Mediterranean diet principles will ensure that the message resonates without alienating traditional values.

5. Develop a Clear Regulatory and Market Framework

Uncertainty around market entry for novel foods remains a barrier. Spanish authorities, working in coordination with EU institutions, should ensure that the pathway from approval to commercialization is transparent and efficient. This includes guidelines for labeling, sourcing, and safety compliance — not only to build public trust but also to encourage investment from food producers. Public-private partnerships could accelerate the scaling of insect farming infrastructure while ensuring adherence to strict quality and traceability standards

6. Integrate Insect Protein into Educational and Public Awareness Campaigns

Awareness must precede adoption. Educational initiatives in schools, culinary academies, and professional training programs can position insect protein as part of Spain’s innovation-driven food future. Public campaigns — whether through media, food influencers, or interactive exhibits at gastronomy fairs — should shift the perception from “strange ingredient” to “smart solution.” Special attention should be given to linking insect consumption to Spain’s leadership in sustainable Mediterranean diets.

7. Foster Research, Innovation, and Rural Development Synergies

Spain should capitalize on EU funding streams like Horizon Europe and the reformed CAP to create innovation clusters where academia, food startups, and farmers collaborate on scalable insect-based solutions. Rural regions hit by agricultural decline could be revitalized by insect farming cooperatives, offering low-footprint, high-value production aligned with Spain’s biodiversity and climate adaptation goals.

Conclusion – Spain’s Path in the Mind-Shifting to the New Era

Spain stands at a pivotal moment in its gastronomic journey — a nation celebrated for its culinary heritage, yet increasingly conscious of the urgent need to adapt to a changing world. The findings of this research reveal a public and professional sector that is not closed to innovation, but one that demands authenticity, trust, and a clear link between the new and the familiar.

The Spanish table has always been a place where tradition meets adaptation. Centuries of maritime trade, migration, and cultural exchange have shaped its cuisine into a vibrant mosaic of flavors and techniques. Today, the challenge — and opportunity — lies in weaving insect protein into that same tapestry, not as a foreign thread but as a natural continuation of Spain’s story of culinary resilience.

For consumers, credibility emerges as the true catalyst. When information is clear, transparent, and endorsed by trusted figures, curiosity turns to openness, and openness to action. For professionals, the path is equally clear: embed innovation within dishes that preserve cultural identity while delivering new nutritional and environmental value. In both groups, trust is the bridge — and trust must be earned through transparency, quality, and relevance to shared values.

The opportunity is amplified by Spain’s global reputation in gastronomy and tourism. What Spain chooses to champion at its dining tables is noticed worldwide. By positioning insect-based gastronomy not as a passing novelty, but as a deliberate,



responsible evolution of the Mediterranean diet, Spain can set an example for Europe and beyond — one where heritage and innovation are not opposing forces but partners in a sustainable future.

Yet, the transformation will require coordination: policymakers to provide clarity and stability in regulation, chefs to inspire and lead cultural acceptance, educators to cultivate awareness from a young age, and entrepreneurs to scale production in ways that serve both urban and rural communities. If these actors align, the barriers revealed in this research — from cultural unfamiliarity to regulatory ambiguity — can be not only dismantled, but turned into strengths.

In embracing insect-based gastronomy, Spain has the potential to reinforce its role as a global leader in both culinary excellence and sustainable innovation. The Mind-Shifting to the New Era initiative offers more than recipes or market strategies — it offers a vision of food that nourishes people, respects the planet, and honors the past while building the future.

Spain's path is clear: the next chapter of its food culture will be written not in opposition to change, but in the confident, creative integration of the new into the enduring rhythm of the old — a shift that could inspire not only its own citizens but the world.



ROMANIA

Romania stands at a crossroads of tradition and innovation in the journey toward sustainable gastronomy. With a deep agricultural heritage and a culinary identity anchored in local, seasonal produce, the country enjoys a strong connection between consumers, producers, and food traditions. Yet, as EU climate objectives, sustainability policies, and global food innovation trends accelerate, Romania is increasingly being called upon to explore alternative proteins—including edible insects—as part of its long-term food security and environmental strategy.

The analysis of both consumer and professional perspectives reveals a measured openness to insect-based foods, tempered by cultural caution. Among consumers, credibility scores for insect-based guidelines are generally high, suggesting that the idea is not dismissed outright when presented with the right framing. Attitude change and willingness to try, however, remain in the moderate range, highlighting the importance of trust-building and exposure strategies.

On the professional side—chefs, restaurateurs, and hospitality experts—the data reveals greater strategic awareness of insect-based gastronomy’s potential. Professionals rate feasibility and efficacy for many guidelines higher than consumers, particularly in areas involving chef-led storytelling, menu integration, and small-portion introduction. This indicates that the supply side may be more ready to innovate than the demand side, provided that communication and sensory experiences are handled skillfully.

This dual reality—professional readiness coupled with consumer cautious curiosity—suggests that Romania’s path forward lies in pilot projects, chef-driven narratives, and targeted sustainability education that can gradually shift attitudes from novelty to normality.



Romania in the Context of Sustainable Gastronomy

Cultural Attitudes

Romania's culinary identity is rooted in centuries-old agricultural traditions, seasonal eating, and a deep respect for regional diversity. From the hearty stews of Transylvania to the fish-rich cuisine of the Danube Delta, food is not merely sustenance—it is a cultural anchor, an expression of heritage, and a source of collective pride. This strong link to tradition means that culinary innovation must negotiate with cultural memory, often requiring more time to gain acceptance than in countries where food culture is more fluid.

For most Romanians, the qualities that define “good food” include freshness, local sourcing, and familiarity of taste and texture. These values are reinforced by the prevalence of small-scale farming and local markets, where seasonal produce and traditional dairy, meat, and baked goods dominate. This environment naturally favors trust in known ingredients and skepticism toward unfamiliar ones—especially those perceived as “foreign” or radically different from traditional staples.

Novel foods, including plant-based meat substitutes and insect-based ingredients, tend to face an initial psychological barrier. They are often met with curiosity tinged with reluctance, influenced by both cultural conservatism and a limited history of exposure. However, this hesitancy is not uniform: younger, urban, and internationally exposed consumers—especially those who travel, study abroad, or engage with global food media—are notably more open to experimentation.

Over the last decade, Romania's food landscape has experienced significant modernization, particularly in large cities such as Bucharest, Cluj-Napoca, Timișoara, Iași, and Constanța. The rise of specialty restaurants, gastro-pubs, and fusion cuisine has introduced diners to more diverse flavor profiles and presentation styles. International food festivals, cooking shows, and the influence of Romanian chefs trained abroad have further expanded culinary horizons. In parallel, food influencers and digital food content creators have emerged as cultural brokers—demonstrating that gastronomic experimentation can coexist with local identity.

This duality—a strong traditional core alongside growing gastronomic curiosity—creates both a challenge and an opportunity for the introduction of insect-based foods. While rural and tradition-focused communities may resist such changes, the urban experimental food scene offers fertile ground for pilot projects, chef-led storytelling, and gradual normalization.

Sustainability Discourse

Environmental awareness in Romania has moved from niche to mainstream over the past 15 years, driven by EU integration, international environmental agreements, and the growing visibility of climate change impacts. Among younger consumers, university students, and urban professionals, concepts like “carbon footprint” and



“zero waste” are increasingly understood, even if they are not always fully integrated into daily behavior.

National sustainability campaigns have achieved notable successes in specific areas:

- Food waste reduction initiatives, often backed by NGOs and EU funding, have been implemented in supermarkets, schools, and restaurants.
- Organic farming and certification have expanded rapidly, especially in Transylvania and other rural regions with strong agricultural heritage.
- Short supply chains and farmers’ markets are being promoted as economic and ecological solutions, reconnecting consumers to producers.

However, the Romanian public discourse on sustainability often remains fragmented and narrow in scope. Recycling, reduced single-use plastics, and “buy local” campaigns dominate the conversation. A systems-based perspective on the entire food chain, including alternative proteins and sustainable gastronomy, is far less common.

Insect-based foods, in particular, have barely entered the mainstream conversation. When they are mentioned, it is usually as a curiosity—covered in lifestyle magazines or television features that present them as “exotic” or “shocking” novelties rather than as a viable, environmentally responsible food source. This framing reinforces the perception that insects are “other” rather than part of a credible solution to sustainability challenges.

The lack of serious, science-backed public communication on the environmental and nutritional benefits of edible insects is a critical gap. Without it, public perceptions are shaped by sporadic, often sensationalist coverage, which can undermine trust and slow adoption.

Implications for the mind-shifting to the new era:

- Cultural strategy must be bifocal—respecting and preserving traditional food values while creating appealing entry points for innovation in urban, cosmopolitan markets.
- Sustainability messaging must be reframed to include edible insects as a serious solution, supported by data and linked to existing environmental priorities.
- Chefs, educators, and influencers will be essential bridges between novelty and normalization, shifting public discourse from “shock factor” to “smart choice.”

Statistical Insights – What the Data Reveals

The research engaged two distinct groups:

- Consumers: representing a spectrum of ages, backgrounds, and culinary experiences across Romania.
- Hospitality Professionals: chefs, restaurant managers, culinary educators, and food entrepreneurs.

Consumer Findings

- Credibility: Mean scores consistently hovered around 3.7–4.1 out of 5, showing that Romanian consumers perceive insect-based food strategies as plausible and trustworthy when framed appropriately.



- **Attitude Change:** Means between 3.3 and 3.9, reflecting a shift from neutral to positive among many participants. Notably, younger urban respondents and those with prior exposure to international cuisines showed the greatest openness.
- **Likelihood to Try:** Means between 3.3 and 3.8, indicating moderate willingness. Prior exposure to insect-based dishes, even through media, correlated with higher scores.

Key Patterns:

- Guidelines that link insect-based foods to familiar formats (e.g., integrating insect flour into bread, pasta, or traditional snacks) rank highest in both credibility and likelihood to try.
- Chef-led storytelling and transparent sourcing significantly improve perception, underscoring the trust placed in culinary authorities.
- There is a notable gap between finding something credible and being ready to try it, suggesting that informational trust alone is not enough—sensory and social experiences are essential next steps.

Professional Findings

- **Feasibility:** Highest-rated guidelines involved small-portion introductions, integration into familiar dishes, and menu labeling strategies that normalize insect ingredients without overwhelming diners.
- **Efficacy:** Professionals consistently identified culinary creativity and personalization as top drivers for acceptance, with mean scores often exceeding 4.0.
- **Intention to Adopt:** While adoption is still hypothetical for many, scores indicate that over half of surveyed professionals would consider pilot implementation if adequate sourcing and regulatory clarity were in place.

Key Patterns:

- Professionals are more likely than consumers to perceive insects as an innovation opportunity rather than a risk.
- Menu placement and pricing psychology are seen as critical—subtle integration into mid-priced items is preferred over positioning insect-based dishes as premium curiosities.
- There is a strong belief among professionals that educating diners through menu narratives and direct engagement will accelerate acceptance.

National Barriers & Opportunities

The statistical results for Romania—when viewed against the country’s socio-cultural and economic landscape—reveal a complex interplay of barriers and opportunities in introducing edible insect-based foods.

Barriers to Adoption

Cultural Conservatism in Food Choices

Romania’s culinary identity is rooted in regional traditions and agricultural self-sufficiency. The consumer survey confirms that novelty foods face higher skepticism unless they are closely tied to familiar sensory cues. Historical dietary patterns emphasize pork, poultry, dairy, and grains, leaving little precedent for insect protein. This cultural distance means insects are often seen not as “food” but as an exotic curiosity.

Sensory and Psychological Resistance

The gap between credibility scores and likelihood to try highlights the “disgust factor”—a well-documented psychological barrier in food acceptance. While ground insect flours in baked goods might bypass this barrier, whole-insect presentations are far less likely to be embraced initially.

Limited Market Availability

Insect-based products remain scarce in Romanian retail or hospitality settings. The absence of visible, accessible examples reinforces the perception that they are a niche or experimental category. Without consistent sensory exposure, consumers’ willingness to try remains largely hypothetical.

Regulatory Ambiguity and Supply Chain Gaps

While the EU Novel Foods Regulation now authorizes several insect species for human consumption, Romania’s domestic regulatory and inspection framework is still adapting. Sourcing compliant, traceable, and competitively priced insect ingredients locally is challenging, particularly for small and medium-sized restaurants.

Opportunities for Growth

Urban Culinary Innovation

Cities like Bucharest, Cluj-Napoca, Iași, and Timișoara have vibrant gastronomy scenes where young professionals, expatriates, and tourists fuel demand for novel dining experiences. The rise of chef-driven pop-ups, fusion restaurants, and food festivals creates fertile ground for carefully staged insect-based menu items.

Sustainability Alignment with EU Policy

The EU’s Farm to Fork Strategy and Protein Plan prioritize alternative proteins as a means to reduce dependency on resource-intensive meat. Romania, as an EU member state, can leverage these frameworks to access funding, technical assistance, and market development programs for sustainable protein innovation.

Trust in Culinary Authorities

The professional survey confirms that chefs and hospitality leaders in Romania are relatively more ready to experiment with insect-based ingredients than consumers are to demand them. This supply-side enthusiasm can be harnessed to drive chef-led public education, cooking demonstrations, and media storytelling campaigns that bridge the trust gap.

Integration into Familiar Formats

Guidelines that pair insect-based ingredients with traditional Romanian dishes (e.g., replacing a portion of wheat flour in cozonac or sarmale wrappers with insect-enriched flour) have the highest potential for acceptance. This culinary “camouflage” allows the nutritional and sustainability benefits to be communicated without triggering strong resistance.

Youth and International Exposure

Romanian students studying abroad, returning expatriates, and internationally minded younger consumers are key early adopters. This demographic is already accustomed to food fusion and sustainability narratives and can serve as ambassadors for normalization.

Alignment with European Strategies

The journey toward integrating edible insect-based foods into Romania’s gastronomic and sustainability landscape is not occurring in isolation. It is closely tied to European Union policies, funding mechanisms, and societal transformation goals. Understanding these connections is critical to positioning Romania within the broader Mind-Shifting to the New Era initiative.



The European Green Deal and the Farm to Fork Strategy

The European Green Deal sets the overarching vision for climate neutrality by 2050, and the Farm to Fork Strategy (F2F) is its food system pillar. F2F explicitly calls for:

- Reduced dependency on conventional animal proteins to lower greenhouse gas emissions, land use, and water consumption.
- Promotion of alternative proteins, including plant-based, microbial, and insect-derived sources, as part of a diversified protein portfolio.
- Consumer empowerment through clearer labeling, sustainability education, and transparent supply chains.

For Romania, this alignment is particularly relevant because the country’s agricultural sector still contributes significantly to national GHG emissions. Shifting even a small portion of protein consumption toward insects could have measurable environmental benefits without undermining cultural food traditions—if executed with strategic framing and public engagement.

The EU Protein Plan

The EU Protein Plan aims to increase self-sufficiency in sustainable protein production within Europe. This has two implications for Romania:

1. Agricultural diversification – Romanian farms could be encouraged to integrate insect farming as a complementary income stream, particularly in regions where climate variability is challenging traditional crop yields.
2. Value chain innovation – Local processing facilities for insect meal and insect-enriched foods would shorten supply chains, reduce costs, and create rural employment opportunities.

Given Romania’s low cost of labor and agricultural infrastructure, the country is well-placed to become a regional supplier if early investments are made in training, technology, and market development.

Horizon Europe and Erasmus+ Synergies

Funding and knowledge-exchange opportunities are available through programs such as:

- Horizon Europe – supporting R&D for novel food technologies, sensory optimization, and consumer acceptance strategies.
- Erasmus+ VET and Adult Education – enabling chef training, curriculum development, and transnational exchanges to build expertise in insect gastronomy.

Romania can leverage these programs to connect chefs, farmers, food scientists, and hospitality managers in a unified capacity-building agenda. The “Mind-Shifting to the New Era” project itself already serves as a living example of such cross-sector collaboration.

The Circular Economy Action Plan

The EU’s Circular Economy framework encourages resource loops and waste minimization. Insect farming

contributes directly to this agenda by:

- Converting organic by-products (e.g., fruit and vegetable trimmings, brewery residues) into high-value protein and fertilizer.
- Reducing reliance on imported soy and fishmeal for animal feed, thus preserving biodiversity and reducing deforestation abroad.

Romania's agricultural processing industry produces significant organic waste streams that could be repurposed for insect farming, creating a closed-loop protein production model.

European Food Safety and Regulatory Progress

The European Food Safety Authority (EFSA) has already approved several insect species for human consumption under the Novel Foods Regulation. Romania benefits from being part of this harmonized framework, as it allows rapid market entry once national labeling and control systems are aligned.

However, EU experience shows that consumer education and trust-building campaigns are essential for uptake—merely authorizing the product is not enough. Countries like the Netherlands, Denmark, and Belgium have combined regulatory readiness with chef-driven public visibility, which Romania can emulate.

Strategic Positioning for Romania in the EU Context

Romania has the potential to become:

- A pilot market for Central and Eastern Europe, showcasing culturally sensitive integration of insect-based foods into mainstream gastronomy.
- A production hub for insect ingredients leveraging low-cost, rural-based operations with EU funding support.
- A training and innovation center through VET and culinary schools, positioning Romanian chefs as regional leaders in sustainable gastronomy.

This strategic positioning would not only advance national sustainability goals but also reinforce Romania's contribution to EU-wide protein diversification objectives.

Strategic Recommendations for Romania

The following recommendations translate the combined findings from the Consumers and Professionals statistical analyses, along with broader European and national context, into actionable strategies. They are designed to guide stakeholders — chefs, hospitality managers, policymakers, educators, entrepreneurs, and the wider food value chain — toward the successful and culturally resonant integration of insect-based foods in Romania.

For Chefs and Hospitality Professionals

Embed Familiarity into Innovation

- Integrate insect ingredients into recognizable Romanian dishes (e.g., mămăligă with insect-based cheese topping, sarmale with partial insect protein mix) to reduce perceived novelty shock.
- Use blended approaches (e.g., 10–20% insect flour in baked goods) as a gateway before offering whole-insect presentations.

Storytelling as a Menu Strategy

- Frame insect dishes around local farm partnerships, sustainability narratives, and nutritional benefits.

- Highlight alignment with Romanian agricultural heritage, drawing parallels between resourcefulness in traditional cuisine and the efficiency of insect farming.

Leverage Sensory Experiences

- Offer tasting menus or “chef’s table” experiences where guests can sample small portions with guided explanations.
- Collaborate with sommeliers to design pairings (wine, craft beer, herbal infusions) that enhance flavors and sophistication.

For Policymakers and Regulators

Create a National Novel Foods Awareness Campaign

- Partner with food industry associations to promote EU-approved insect species and clarify safety, nutritional value, and environmental impact.
- Ensure labeling guidelines are clear, transparent, and culturally sensitive.

Incentivize Sustainable Protein Production

- Introduce micro-grants and tax deductions for farms diversifying into insect rearing, especially in rural and economically disadvantaged regions.
- Integrate insect farming into national rural development programs under the CAP (Common Agricultural Policy).

Strengthen Food Education in Schools

- Incorporate edible insect topics into science, environmental studies, and nutrition curricula.
- Support school catering pilots that introduce insect-based snacks or pasta in partnership with trusted suppliers

For Entrepreneurs and Food Start-Ups

Focus on Functional and Packaged Products

- Begin with processed formats (protein bars, pasta, bread) where insect ingredients are invisible but functional.
- Position products within the sports nutrition, health-conscious, and eco-conscious consumer segments.

Build Strategic Alliances

- Collaborate with fitness centers, organic food shops, and eco-markets to test and promote products.
- Form partnerships with hospitality chains for limited-time promotional menus.

Leverage Romania’s Low-Cost Production Potential

- Explore export opportunities for insect meal and flour to EU markets with higher consumer readiness, while building the domestic market in parallel

For Educators and VET Institutions

Integrate Insect Gastronomy into Professional Training

- Develop modules on insect-based cooking, nutritional science, and sustainable sourcing for culinary schools.
- Invite guest chefs from EU countries with advanced insect gastronomy experience for workshops and

demonstrations.

Create Experiential Learning Opportunities

- Partner with insect farms for student visits and internships.
- Support competitions where students design innovative dishes incorporating insect proteins.

For Media and Influencers

Shift from Shock to Sophistication

- Avoid sensationalist portrayals (e.g., “dare challenges” or “weird food” framing) and instead emphasize culinary artistry, sustainability, and wellness.
- Collaborate with respected chefs, nutritionists, and environmental advocates to provide credible voices in public discourse.

Highlight Local Success Stories

- Showcase Romanian start-ups, farms, and restaurants pioneering insect-based products.
- Use before-and-after narratives to demonstrate how consumer skepticism can evolve into acceptance.

Cross-Sector Collaboration Priorities

- National Task Force on Sustainable Proteins – bringing together ministries, academia, industry, and civil society to coordinate strategy.
- EU-Backed Pilot Projects – co-funded initiatives to implement insect-based menus in hotels, schools, and hospitals.
- Annual Gastronomy & Sustainability Forum – positioning Romania as a thought leader in Central and Eastern Europe for alternative proteins.

Conclusion – Romania’s Path in the Mind-Shifting to the New Era

Romania stands at a decisive crossroads in its gastronomic evolution. The statistical evidence from both consumers and professionals tells a story of high credibility, moderate-to-strong openness, and a cautiously optimistic attitude toward insect-based foods. While skepticism exists — rooted in cultural familiarity, limited exposure, and a conservative culinary identity — the foundation for change is stronger than it might appear at first glance.

The professional community has already shown readiness to experiment, particularly when insect-based foods can be seamlessly integrated into familiar culinary formats. This group recognizes not only the nutritional and environmental benefits, but also the potential for differentiation in an increasingly competitive food and hospitality market. Consumers, while more reserved, are influenced by credibility and storytelling. When products are presented with transparency, cultural sensitivity, and a sense of belonging to Romanian food heritage, acceptance levels rise. The statistical correlations in the data reinforce this: credibility strongly predicts both attitude change and willingness to try.



From a European perspective, Romania is operating within a policy framework — the EU Farm to Fork Strategy, Circular Economy Action Plan, and Protein Diversification Initiatives — that will increasingly reward early movers. The nation's rich agricultural base, growing sustainability awareness, and emerging innovation hubs position it to be more than just a follower in this space; Romania has the potential to become a regional leader in sustainable protein innovation for Central and Eastern Europe.

However, realizing this potential will require:

- Bridging the knowledge gap for consumers.
- Scaling pilot projects into mainstream offerings.
- Aligning policies, education, and business incentives to create a coherent national roadmap.
- Shifting the narrative — from novelty and exoticism to culinary sophistication, heritage, and environmental responsibility.

The “Mind-Shifting to the New Era” in Romania will not be achieved overnight. It will be the product of cumulative actions by chefs, educators, policymakers, entrepreneurs, and communicators — all working to weave insect-based gastronomy into the fabric of national food culture.

If done well, Romania will not only diversify its protein sources and strengthen its food security, but also position itself as an innovator in the European sustainable gastronomy movement, showing that even deeply rooted culinary traditions can adapt and thrive in the face of global change.



ITALY

Italy, a country celebrated for its culinary tradition and deeply rooted food identity, is at a pivotal moment in redefining its gastronomic future through sustainability and innovation. As global and European strategies urge a shift toward alternative proteins, Italy finds itself balancing its rich cultural heritage with the demands of environmental responsibility and dietary evolution.

The data from both Italian consumers and professionals reveals a nuanced picture. Consumers show moderate-to-high trust in insect-based food strategies but lower enthusiasm for actual adoption—particularly among those without prior experience. Professionals, meanwhile, express confidence in the guidelines' feasibility and efficacy but display measured hesitation in intention to apply, hinting at operational or perceptual uncertainties.

What emerges is a gap between belief and behavior: while many Italians accept the logic and potential of insect-based gastronomy, only a portion are ready to embrace it in practice. This gap, however, is not a wall—it is a bridgeable space where education, exposure, and culinary creativity can thrive. Italy's strength lies in its chefs, food entrepreneurs, and educators, who have the tools and cultural capital to reframe edible insects not as a radical departure, but as a forward-looking extension of Italy's commitment to quality, flavor, and sustainability.



Italy in the Context of Sustainable Gastronomy

Cultural Attitudes

Italian cuisine is more than nourishment—it is national identity. From regional pastas to artisanal cheeses and meticulously sourced olive oils, food in Italy is tied to family traditions, local pride, and generational transmission. It is a culture where quality is sacred, ingredients are celebrated, and new ideas must earn their place by proving both respect and relevance.

This deep-rooted culinary conservatism presents a challenge for introducing novel ingredients such as insects. However, it also creates an opportunity. Italian consumers respond positively when new elements are integrated thoughtfully—especially when linked to health benefits, environmental responsibility, or culinary artistry.

Notably, the concept of “ingredient storytelling” is not foreign to Italian cuisine. With the right narrative, chefs and food educators can frame insects not as a replacement for beloved foods, but as an innovative addition to the country’s evolving gastronomic legacy

Sustainability Discourse

Italy has made important strides in aligning with EU sustainability goals, particularly in the areas of organic farming, short supply chains, food waste reduction, and eco-certification. The Mediterranean diet itself has been promoted as a model of sustainable eating, rich in plant-based ingredients and seasonal variety.

Yet, the discourse around alternative proteins—especially insect-based options—remains largely peripheral. While academic, environmental, and culinary circles have begun to engage with the topic, the broader public narrative has not yet caught up. Most Italians remain unfamiliar with insect-based foods outside of international media or niche culinary experiments.

To bring this issue into the mainstream, sustainability messaging in Italy must go beyond carbon footprints and food miles. It must include protein diversification as a critical solution to environmental strain and food security—ideally in ways that connect with Italy’s culinary values of innovation, balance, and ingredient excellence.



Statistical Insights – What the Data Reveals

The Italian dataset includes two key groups:

- Consumers: Spanning a diverse range of backgrounds and culinary experiences.
- Hospitality Professionals: Including chefs, culinary educators, restaurateurs, and food entrepreneurs.



Consumer Findings

- Credibility: High overall (mean range: 3.63–3.92), indicating that consumers view the guidelines as plausible and trustworthy
- Attitude Change: More moderate (means: 2.77–3.23), reflecting a cautious shift toward acceptance.
- Likelihood to Try: Slightly higher than attitude change but still moderate (means: 3.08–3.38), with significant variability.



Top Guidelines:

- G14, G3, and G6 rank highest across all three metrics, followed closely by G12 and G5. These guidelines emphasize creativity, chef-led storytelling, and personalization—concepts Italians tend to value in food experiences.

Lowest Guidelines:

- G7 and G8 consistently rank lowest across metrics, suggesting low cultural resonance or operational appeal.

Key Patterns:

- Strong correlation between attitude change and likelihood to try ($r = 0.86$), indicating that changing minds is key to changing behavior.
- Moderate correlation between credibility and both attitude and trial intent ($r \approx 0.53$ – 0.62), showing that trust is necessary but not sufficient.

Group Differences:

- Consumers with prior insect-eating experience show dramatically higher willingness to try (mean = 4.01) compared to those without (mean = 2.37), underlining the power of exposure.

Professional Findings

- Feasibility & Efficacy: Generally strong across guidelines, with average scores around 3.6–3.9.
- Intention to Apply: Lower (means often below 3.3), indicating a gap between belief in a guideline and readiness to use it.

Top Guidelines:

- G11 leads the rankings with consistently high scores in all metrics. G5, G3, G6, and G12 also perform strongly, blending transparency, practical implementation, and personalization.

Lowest Guidelines:

- G7 and G8 once again fall behind, scoring poorly across feasibility, intention, and efficacy.

Correlational Analysis:

- Moderate correlations among all three metrics suggest professionals assess the guidelines cohesively. However, intention to apply does not always track with perceived efficacy—indicating that practical concerns, not conceptual doubts, may be the barrier.

Item & Factor Analysis:

- Efficacy ratings show strong internal consistency ($\alpha = 0.81$).
- Two main clusters emerged:

oCluster 1: Personalized and creative integration (e.g., G1, G5, G12, G13).

oCluster 2: Transparency and broad engagement (e.g., G6, G10, G11).

oG3 (chef storytelling) stands out as its own distinct influence—highly rated but uniquely perceived.

Group Comparisons:

- No significant differences in efficacy perception between professionals with or without prior insect experience, nor between restaurants and other establishments—suggesting a unified professional view across sectors.

National Barriers & Opportunities

Barriers to Adoption

Cultural Rigidity and Ingredient Identity

Italian cuisine prizes consistency, authenticity, and tradition. Introducing insects may provoke emotional resistance unless integrated with sensitivity to regional pride and culinary ritual.

Intent-to-Action Gap

The data shows that even when consumers or professionals find a strategy credible and effective, they may still hesitate to act. This inertia must be addressed through familiarity, tasting experiences, and normalization.

Limited Visibility and Access

Insect-based products are rare in Italian supermarkets, menus, or media. Their scarcity reinforces their perception as “non-food” or fringe, especially in contrast to Italy’s world-famous local ingredients.

Opportunities for Growth

Strong Baseline Credibility

Consumers already trust the basic premise of insect-based foods. This credibility can be leveraged through carefully designed educational and culinary experiences.

Chef-Driven Innovation

Italy’s chef culture is a powerful asset. G3’s high performance highlights that storytelling, tasting menus, and culinary authority can strongly influence public attitudes.

Operational Clarity Among Professionals

Professionals rate guidelines highly on feasibility and efficacy—indicating that with minimal support and structured guidance, implementation is within reach.

EU Strategy Alignment

Italy's leadership in food policy, combined with access to EU sustainability funds, places it in an ideal position to become a pioneer in mainstreaming edible insects

Alignment with European Strategies

Italy's potential to advance insect-based gastronomy is tightly interwoven with its role in the European Union's broader sustainability and innovation agenda. The country already plays a central part in implementing key EU frameworks, and edible insects offer a concrete, forward-looking avenue to strengthen that role.



Farm to Fork Strategy

The Farm to Fork (F2F) Strategy—part of the European Green Deal—calls for more sustainable food systems across the continent. It explicitly promotes protein diversification and a reduction in the environmental impact of conventional animal agriculture. Italy's culinary traditions, rich agricultural biodiversity, and advanced food industry can make it a flagship for applying this strategy creatively.

By positioning insect-based foods within the F2F framework, Italy can expand its reputation as a food innovation hub—balancing heritage with bold adaptation. Insects provide not only environmental advantages but also nutritional and operational flexibility that aligns with Italy's emphasis on quality and craftsmanship.

EU Protein Plan

The EU Protein Plan highlights the need for increased self-sufficiency in protein production across Europe. For Italy, this offers an opportunity to complement traditional protein sources (legumes, dairy, meat) with insects—particularly as part of a circular economy model.

Small-scale insect farms, especially in southern and central Italy, could generate new income for rural communities while supporting regenerative agriculture. These decentralized production systems also contribute to resilience and regional food security—strategic priorities for Italy under climate stress.

Horizon Europe & Erasmus+

Horizon Europe can provide funding for culinary research, sensory acceptance studies, and sustainable product development using insect ingredients. Italy's strong academic and food R&D institutions are well-positioned to participate in or lead such projects.

Likewise, Erasmus+ supports educational innovation, including VET curriculum development. Italian hospitality schools and culinary academies can become European leaders in designing and teaching modules on insect gastronomy, nutrition, and sustainable sourcing.

Circular Economy Action Plan

Insect farming naturally aligns with the EU's Circular Economy goals, converting food waste and organic by-products into protein and fertilizer. This is especially relevant for Italy, where food waste reduction is already a

national priority. Insect-based models can reinforce zero-waste cooking trends, agritourism initiatives, and bioeconomy strategies, linking tradition with environmental innovation.

Strategic Recommendations for Italy

To bridge the gap between positive perceptions and real-world implementation, Italy must activate its most influential culinary and educational players—while ensuring that policy, media, and market forces move in step.

For Chefs and Culinary Professionals

Leverage Storytelling and Sensory Experience

Chefs should position insect-based dishes within Italy's tradition of food as theater and narrative. Dishes should tell a story—not just about sustainability, but about creativity, craftsmanship, and curiosity. Tasting menus, food festivals, and cooking shows offer ideal platforms for sensory-led mind-shifting.

Adapt Familiar Formats First

Pasta, bread, sauces, and fillings made with insect flour can serve as a comfortable entry point. Substitution-based recipes preserve culinary integrity while offering a subtle introduction to novel proteins.

Create Strategic “Anchor Dishes”

Italian cuisine often celebrates certain dishes as signatures of innovation. Chefs can develop one or two emblematic insect-based preparations that become conversation starters and media-friendly visuals.

For Policymakers and Institutions

Integrate Insects into National Food Strategies

Insect-based foods should be explicitly included in Italy's sustainability, innovation, and agricultural development plans. This includes recognition within food labeling systems, research funding calls, and green public procurement guidelines.

Establish Regulatory Clarity and Safety Protocols

Clear national guidelines are needed to support chefs, entrepreneurs, and retailers in sourcing, labeling, and serving insect-based foods under EU Novel Food legislation.

Support Pilot Programs and Public Tastings

Government-funded pilots—especially in schools, training centers, or public foodservice—can normalize insect consumption and gather important data for policy development.

For Entrepreneurs and Food Innovators

Focus on Processed and Portable Products

Protein bars, sports snacks, and packaged pasta allow insect ingredients to reach health-conscious consumers without triggering visual or textural aversion.

Partner with Established Italian Brands

Insect-based startups can co-develop product lines with artisanal food producers, wine estates, or eco-resorts to

elevate image and reach new audiences.

Position Products Within Eco-Luxury and Performance Nutrition

Instead of competing on novelty, insect-based products can occupy high-value niches: gourmet health foods, climate-smart specialties, and functionally superior ingredients.

For Educators and VET Institutions

Modernize Culinary Curricula

Hospitality and culinary training programs should embed insect gastronomy within sustainability modules, giving young chefs the tools and confidence to explore responsibly.

Promote Cross-Border Exchange

Encourage Italian students and trainers to engage in Erasmus+ exchanges with schools in countries where insect gastronomy is more advanced—e.g., the Netherlands, Denmark, or Belgium.

Use Competitions and Labs to Drive Innovation

Encourage culinary students to design original dishes using insect proteins—evaluated not just on taste but also on sustainability, nutrition, and storytelling.

For Media and Influencers

Reframe the Narrative

Move away from “dare” and “shock” frames and toward elegance, intelligence, and planetary relevance. Showcase insect-based dishes with high-quality photography and chef testimonials.

Celebrate Local Pioneers

Highlight early adopters—chefs, teachers, entrepreneurs—as change agents. Document their journeys to inspire others.

Create Storytelling Content

Short-form videos, documentaries, and Instagram reels can demystify insect ingredients while connecting them to values Italians hold dear: food culture, innovation, and responsibility.

Conclusion – Italy’s Path in the Mind-Shifting to the New Era

Italy’s relationship with food is as emotional as it is functional. Food is memory, identity, pleasure—and occasionally, resistance to change. And yet, the very same culture that reveres tradition also honors excellence, reinvention, and culinary leadership. This duality is what makes Italy such a compelling frontier for sustainable gastronomy.

The statistical findings confirm it: both consumers and professionals show strong belief in the credibility and efficacy of insect-based food strategies. The challenge lies not in belief, but in action—moving from theoretical acceptance to practical implementation. And that leap, in Italy, will only happen through trust, taste, and time.



Professionals already see the value; chefs in particular are emerging as catalysts. Consumers are open, but cautious—unless they’ve had direct experience, in which case openness often transforms into enthusiasm. This insight alone offers a powerful strategy: normalize through experience.

From a European policy perspective, Italy is not lagging. It is poised. With its culinary prestige, regional food systems, sustainability commitments, and educational infrastructure, the country can become a flagship of the “mind-shifting” movement—not despite its traditions, but because of them.

To succeed, Italy must:

- Turn credibility into curiosity
- Turn curiosity into tasting
- Turn tasting into trust
- And turn trust into transformation

The “Mind-Shifting to the New Era” in Italy will be written not only in reports, but on menus, in classrooms, and on dinner tables. It will be shaped by chefs who dare, by teachers who inspire, and by citizens who try something new—not because they must, but because it feels like the intelligent next step in a long, delicious journey.

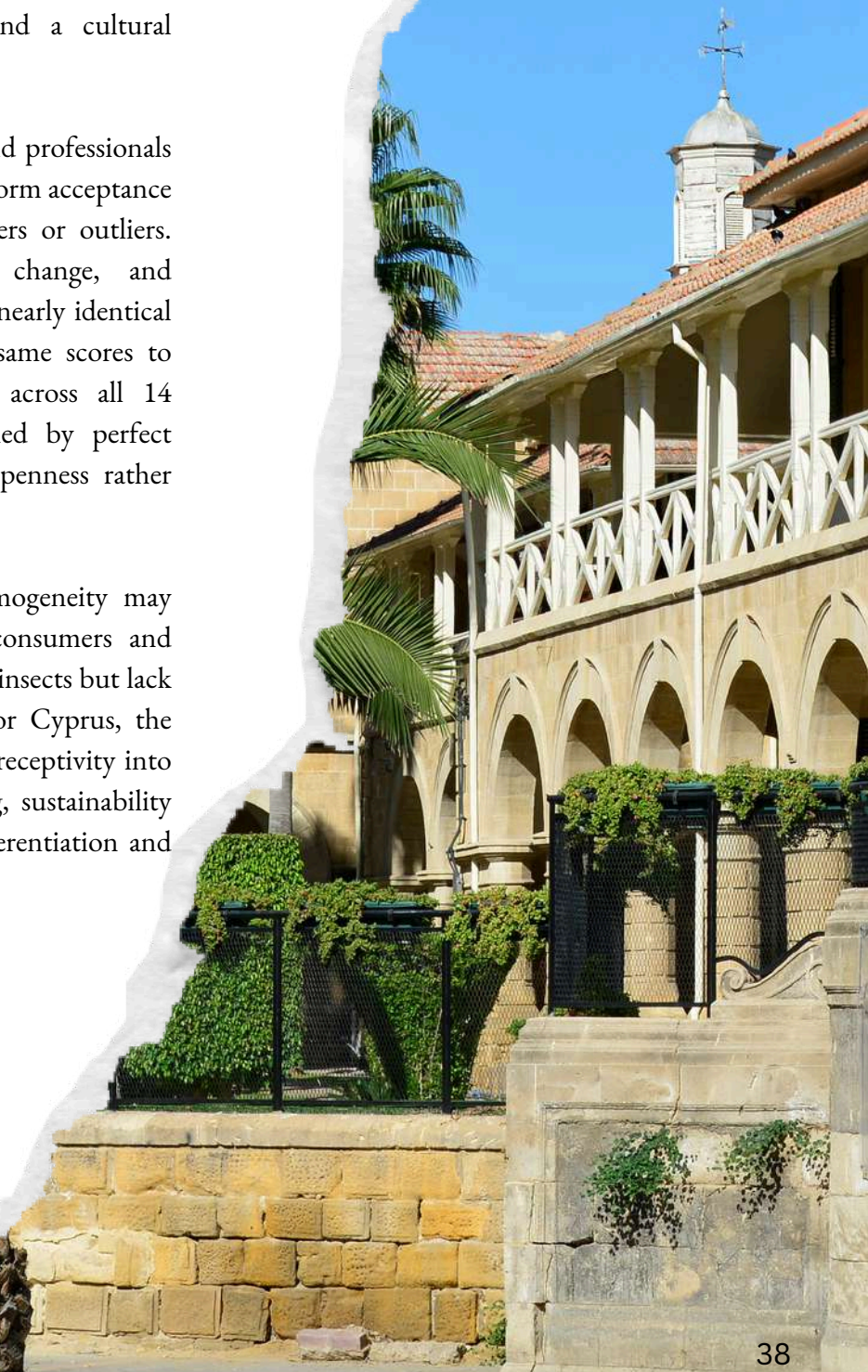


CYPRUS

Cyprus presents a unique landscape in the journey toward sustainable gastronomy. Rooted in Mediterranean culinary heritage and enriched by its strategic location between Europe and the Middle East, Cyprus holds a strong food identity that balances tradition and innovation. As sustainability and protein diversification enter the European agenda more forcefully, Cyprus faces a timely opportunity to explore insect-based gastronomy as both a strategic necessity and a cultural evolution.

The statistical analysis from both consumers and professionals reveals an unusual pattern: an exceptionally uniform acceptance across all guidelines, with no clear frontrunners or outliers. Consumers evaluated credibility, attitude change, and likelihood to try insect-based food strategies at nearly identical levels, while professionals assigned the exact same scores to feasibility, intention to apply, and efficacy across all 14 guidelines. This rare consistency—accompanied by perfect internal correlations—suggests a generalized openness rather than selective enthusiasm or resistance.

Rather than indicating indifference, this homogeneity may reflect a nascent stage of exposure, where consumers and professionals alike are open to the idea of edible insects but lack deep familiarity or contrasting experiences. For Cyprus, the path forward lies in transforming this baseline receptivity into targeted actions—using chef-driven storytelling, sustainability education, and menu innovation to foster differentiation and engagement.



Cyprus in the Context of Sustainable Gastronomy

Cultural Attitudes

Cypriot gastronomy is characterized by strong family traditions, a deep respect for fresh local ingredients, and a Mediterranean diet that values simplicity, seasonality, and communal dining. From souvla and halloumi to vine leaves and lentil stews, Cypriot food is both cultural heritage and daily comfort.

This culinary identity fosters trust in known dishes and ingredients, while maintaining moderate skepticism toward novelty. Unlike in countries with more experimental gastronomic cultures, Cypriot consumers often evaluate new food ideas through a lens of tradition and dietary conservatism. However, this cultural grounding is not immutable—it coexists with curiosity, especially among younger generations who are increasingly exposed to global food trends through travel, digital media, and international education.

Recent years have seen a modest rise in food innovation, particularly in urban centers such as Nicosia and Limassol. The emergence of fusion restaurants, vegetarian cafés, and health-conscious brands signals an appetite for culinary evolution, especially when it is framed as a complement—not a challenge—to traditional values.

Edible insects, introduced subtly and with reference to environmental and health benefits, may find fertile ground in these evolving urban culinary circles. However, their broader acceptance will depend on trust, exposure, and alignment with national identity.

Sustainability Discourse

Cyprus has begun to engage more actively with environmental sustainability, driven by its obligations as an EU member state and its vulnerability to climate change impacts such as water scarcity and rising temperatures. Sustainability campaigns in Cyprus have focused on:

- Water conservation and drought resilience
- Renewable energy adoption
- Waste management and plastic reduction
- Organic and local agriculture

However, the topic of sustainable protein sources—including insect-based foods—remains underrepresented in the public conversation. Alternative proteins are often absent from sustainability campaigns, school curricula, and media discourse, resulting in a low level of public awareness.

The current discourse on food sustainability is still dominated by more familiar narratives: reducing meat intake, buying local, and minimizing food waste. Insect-based foods are largely seen as a novelty, occasionally featured in international



articles or documentaries but not discussed within national policy, media, or culinary institutions. This presents both a gap and an opportunity. Cyprus can leverage its environmental vulnerabilities and EU-aligned sustainability goals to frame edible insects not as “exotic curiosities,” but as pragmatic, climate-smart solutions.

Statistical Insights – What the Data Reveals

The Cyprus dataset includes two groups:

- Consumers: Representing a range of demographics and food habits
- Hospitality Professionals: Chefs, managers, culinary educators, and entrepreneurs



Consumer Findings

- Credibility: Consistently moderate-to-high (mean ≈ 3.60 – 3.65)
- Attitude Change: Same as above (mean = 3.60)
- Likelihood to Try: Same (mean = 3.60)



Key Observations:

- All three metrics were rated nearly identically across guidelines, with no meaningful variability.
- Perfect correlations ($r = 1.00$) between credibility, attitude change, and likelihood to try—each respondent rated all three dimensions the same for each guideline.
- Highest-performing guidelines (G4 and G14) only marginally exceeded the rest (compound scores of 3.62 and 3.61 vs. 3.60 for the others).
- No data was available for G1–G3 in the consumer dataset.
- The uniformity suggests a shared, general openness but limited awareness or differentiated experience.

Professional Findings

- Feasibility, Intention to Apply, and Efficacy: All guidelines scored 3.50 with identical medians and standard deviations (0.83).
- Every respondent rated all 14 guidelines the same on all three metrics.

Key Observations:

- Professionals did not differentiate between guidelines—no clear favorites or weak points emerged.
- Correlation between all metrics = 1.00 .
- Compound scoring and “high rating” proportions (≥ 4) were identical for every guideline (100%).
- No significant differences across establishment types or professional backgrounds.

This extreme uniformity suggests either:

- (a) A baseline shared belief in the relevance of all guidelines, or
- (b) Limited personal experience, leading to generalized but non-specific positive impressio

National Barriers & Opportunities

Barriers to Adoption

Limited Awareness and Exposure

Edible insects are not part of Cyprus's traditional diet and have little presence in media, retail, or hospitality. Consumers and professionals alike lack direct exposure to insect-based foods, contributing to their undifferentiated evaluations.

Cultural Conservatism

Food is a deeply emotional and cultural topic in Cyprus. New ingredients, especially those framed as unusual or foreign, may be viewed with caution unless clearly linked to benefits or trusted sources.

Policy and Regulatory Invisibility

Despite EU-level authorization of insect species for human consumption, there is little national policy guidance or institutional communication in Cyprus. Regulatory ambiguity may prevent entrepreneurs from exploring this market.

Opportunities for Growth

General Receptivity

The homogeneity of ratings, while limiting guideline differentiation, indicates an important signal: there is no major resistance. This “neutral-to-positive” starting point is ideal for education, pilot projects, and trust-building efforts.

Urban Culinary Experimentation

Nicosia, Limassol, and Larnaca feature a growing number of innovative dining spaces and socially conscious cafés. These can serve as early adopters and testbeds for insect-based menu items.

Sustainability Leverage

As a Mediterranean island facing increasing environmental pressures, Cyprus can frame insect consumption as a smart, resource-efficient choice aligned with EU sustainability goals.

Hospitality Sector Engagement

The high uniform positivity among professionals means the sector may be ready to engage—if provided with the tools, sourcing options, and communication strategies to do so.

Alignment with European Strategies

Cyprus's movement toward integrating edible insect-based foods is not happening in isolation. As an EU member state, the country is embedded in a broader network of strategic frameworks that emphasize sustainability, food innovation, and protein diversification. While Cyprus has yet to fully engage with these agendas at the national level, the alignment is clear—and full of untapped potential.



·Farm to Fork Strategy

Encourages protein diversification and reduced reliance on conventional meat—goals that insect proteins serve directly.

·EU Protein Plan

Supports increased production of sustainable proteins. Cyprus can explore small-scale insect farming for domestic and regional markets.

·Horizon Europe & Erasmus+

Funding opportunities exist for education, training, and food innovation projects—including curriculum development in VET and chef schools.

·Circular Economy Action Plan

Insect farming naturally supports the goals of the EU's Circular Economy Action Plan. It closes loops by converting organic by-products into high-value protein and fertilizer, reduces reliance on imported soy and fishmeal, and contributes to waste minimization. For Cyprus, where agricultural waste and food processing residues are present but underutilized, this model offers a sustainable alternative for managing biowaste streams while producing locally valuable inputs for food and feed.

This closed-loop model could be especially impactful in island economies where imports are costly, land is limited, and local production needs to be optimized for efficiency and resilience.

Strategic Recommendations for Cyprus

The statistical evidence from Cyprus reveals a rare and powerful opportunity: a population—both consumer and professional—that is neither deeply resistant nor heavily biased toward one type of intervention. This blank slate allows for thoughtful, guided strategy-building rooted in European best practices, cultural sensitivity, and local innovation.

The following recommendations are designed to translate Cyprus's baseline receptivity into momentum. They address key stakeholders—chefs, policymakers, entrepreneurs, educators, and media actors—and offer tangible pathways toward integrating insect-based foods in a way that respects Cypriot identity while advancing EU sustainability goals.

For Chefs and Hospitality Professionals

- **Introduce Familiarity First:** Start with invisible formats like insect-enriched bread, pasta, or sauces.
- **Storytelling and Sustainability:** Present insect dishes with narratives tied to climate resilience, EU innovation, and Cypriot ingenuity.
- **Pilot Events:** Host tasting menus, themed events, or seasonal specials that introduce insects in curated, low-pressure settings.

For Policymakers and Institutions

- **Clarify Regulatory Frameworks:** Issue guidance on sourcing, labeling, and serving edible insects under EU law.
- **Launch Public Awareness Campaigns:** Position insects not as novelties, but as a sustainability strategy.

- Support Pilot Projects: Fund local collaborations between chefs, insect farms, and educational institutions.

For Entrepreneurs and Food Start-Ups

- Start with Processed Products: Protein bars, snacks, and pasta offer lower psychological resistance.
- Build Strategic Partnerships: Collaborate with eco-shops, hotels, and food festivals to test product-market fit.
- Emphasize Innovation: Brand Cyprus as a Mediterranean leader in smart protein innovation.

For Educators and VET Institutions

- Create Training Modules: Develop courses on insect gastronomy, sustainable sourcing, and culinary creativity.
- Foster International Exchange: Connect Cypriot culinary students with peers in EU countries where insect gastronomy is more developed.

For Media and Influencers

- Promote Sophistication Over Shock: Showcase aesthetic dishes, expert chef voices, and environmental logic—not just “weird food” narratives.
- Highlight Local Innovators: Share stories of Cypriot chefs and entrepreneurs leading the way.

Conclusion – Cyprus’s Path in the Mind-Shifting to the New Era

Cyprus stands at a unique inflection point in its gastronomic and sustainability journey. The data reveals a rare and telling insight: both consumers and professionals have expressed an evenly distributed, moderately positive view toward edible insect-based foods. Unlike countries where certain strategies clearly stand out—or where resistance to novelty dominates—Cyprus presents a tabula rasa, a clean starting point where perceptions have yet to fully form. This is not a weakness. It is an invitation.

The uniformity of responses—perfect correlations between credibility, attitude, and intention to try—signals that Cyprus has not yet been polarized by the idea of edible insects. There is no hard cultural wall to scale, nor a deep familiarity to unlearn. Instead, there is openness. Curiosity. A calm neutrality waiting to be shaped by experience, exposure, and trust.

Among professionals, this readiness is especially striking. Chefs, restaurateurs, and culinary educators rated every guideline with equal optimism—suggesting not only conceptual acceptance, but also a willingness to implement, provided the path is clear. These professionals represent a powerful lever for change. If activated through training, storytelling, and regulatory support, they can shift insect-based gastronomy from idea to implementation.

For consumers, credibility appears to be the gateway. When insect-based strategies are framed with transparency, sustainability, and alignment to Mediterranean values, the Cypriot public responds with cautious interest. This interest must now be nurtured through visibility, tasting experiences, and cultural integration—not shock tactics or one-off campaigns, but through slow, meaningful exposure and local storytelling.



From a European perspective, Cyprus is ideally positioned to become a visible actor in the continental protein transition. With strong ties to Mediterranean cuisine, a growing sustainability agenda, and access to EU tools such as the Farm to Fork Strategy, Erasmus+, and Horizon Europe, the island can craft a uniquely Cypriot approach to innovation—one that blends local identity with global urgency.

However, success will not be automatic. It will require:

- Building regulatory clarity and institutional trust
- Supporting chefs and VET institutions to lead cultural change
- Investing in sustainable food education and culinary experimentation
- Developing processed insect-based products that feel native, not foreign
- Shifting public discourse from exoticism to environmental intelligence

If Cyprus seizes this moment—through coordinated action across public and private sectors—it can shape its own narrative in the emerging field of alternative proteins. Not as a follower, but as a thoughtful innovator grounded in its cultural strengths.

The "Mind-Shifting to the New Era" in Cyprus will not happen overnight. But step by step—through guided exposure, chef-led initiatives, and inclusive food dialogue—the island can move from latent potential to visible leadership. And in doing so, Cyprus may not only change what's on the plate, but also how its people think about the future of food, sustainability, and identity in the 21st century.



COUNTRY PORTRAIT: TURKEY



TURKEY

Turkey occupies a unique position at the intersection of continents, cultures, and trade routes. Its gastronomy reflects centuries of exchange between Europe, Asia, and the Middle East, producing one of the richest culinary repertoires in the world. Yet this very depth of tradition presents both an asset and a challenge when introducing novel, sustainability-driven ingredients such as insect protein.

This report brings together the findings from two national surveys — one targeting hospitality professionals and one targeting consumers — conducted under the Mind-Shifting to the New Era project. The statistical results reveal high receptivity in certain segments, but also underline cultural and regulatory barriers that must be addressed for any large-scale adoption.

Key takeaways include:

- Credibility as a gateway: In both professionals and consumers, trust is the strongest predictor of willingness to try.
- Chef-led influence: Storytelling and demonstration by respected culinary figures greatly increases openness.
- Urban–rural divide: Metropolitan areas and tourist hubs show higher readiness than regional markets.
- Opportunities in tourism and export: The alignment of Turkey’s gastronomy with European sustainability goals can create both inbound and outbound market channels.

The findings suggest that with careful cultural integration, religious compliance certification, and regulatory readiness, Turkey can position itself as a bridge between European and Middle Eastern sustainable gastronomy markets turning novelty into a credible, desirable, and economically viable reality.



Turkey in the Context of Sustainable Gastronomy

Cultural Attitudes

Food in Turkey is more than nourishment; it is a central pillar of identity, hospitality, and social connection. Meals are long, often communal affairs, where freshness, flavor, and tradition take precedence. The emotional attachment to familiar dishes — from regional kebabs to olive oil-rich mezze — is profound.

While this could seem to close the door to new food sources, Turkey's history tells another story. Its cuisine is a palimpsest of influences: Central Asian nomadic food traditions, Ottoman imperial banquets, Levantine spice routes, and modern European trends have all been incorporated over centuries. The key has always been adaptation through trusted channels — new elements are introduced slowly, often embedded within familiar formats and endorsed by recognized culinary authorities.

At present, insect-based foods have no established place in the public imagination. When they are mentioned, it is usually in sensationalist media pieces portraying them as exotic novelties, rather than as serious tools for sustainability.

Sustainability Discourse

Turkey's sustainability conversation has gained traction in recent years, driven largely by urban middle-class and youth movements.

Initiatives include:

- Nationwide plastic bag regulations (introduced in 2019)
- Growing popularity of organic farmers' markets in major cities
- Campaigns targeting food waste reduction and promoting short supply chains

However, the scope of public discourse remains narrow and tactical. Sustainability is often equated with visible, immediate actions (plastic reduction, recycling, organic labels) rather than a systems-level rethinking of how food is produced, sourced, and consumed.

Protein diversification — especially through novel sources like insects — is absent from mainstream debate. This gap represents both a barrier and an opportunity: without an existing narrative, public perception can be shaped from scratch, but doing so will require strong framing that connects insect protein to familiar values like agricultural innovation, health, and national pride in culinary creativity.

Turkey's role as a member of the EU Customs Union means that regulatory developments in Europe, particularly in novel food approvals and sustainability labeling, are likely to influence — and potentially accelerate — similar frameworks domestically



Statistical Insights – What the Data Reveals

The Turkish data paints a nuanced picture of a nation standing at the crossroads of curiosity and caution. Both the hospitality professionals and consumers surveyed demonstrated a capacity for openness — but only under the right conditions, and with very specific levers influencing their decisions.

Among hospitality professionals, the guidelines that resonated most strongly were those that embedded insect proteins discreetly into familiar dishes. When the ingredient was introduced through recognizable formats — a delicate pastry, a hearty bread, or a richly spiced sauce: its novelty was softened, reframed not as a challenge to tradition but as an enhancement.



In these cases, professionals not only rated the guidelines highly in terms of credibility, but also indicated a genuine likelihood to adopt them in practice. The key, they suggested, was to preserve the sensory identity of a dish while enriching it with a forward-looking ingredient.

Another theme emerged with unmistakable clarity: the power of chef-led storytelling. In a culinary culture where the figure of the chef is both a craftsman and a cultural authority, the endorsement of respected gastronomic leaders carried immense weight. When professionals imagined insect proteins being championed by a celebrated Turkish chef, served with confidence and contextualized within a narrative of innovation and sustainability, their resistance diminished significantly. This mirrors the way other food trends — from molecular gastronomy to farm-to-table — have successfully entered the Turkish mainstream in recent decades.

On the consumer side, the statistical patterns revealed an equally compelling story. Across the three core metrics — credibility, attitude change, and likelihood to try — the correlations were remarkably high. In practice, this means that once Turkish consumers believe in the credibility of a message or source, their attitudes shift swiftly, and the step from consideration to action is shorter than in many other European contexts. Unlike markets where credibility and willingness to act remain far apart, in Turkey trust appears to be the true catalyst — unlock it, and behavior follows.

The guidelines that most persuaded consumers were not those that leaned on abstract sustainability arguments, but those grounded in familiarity and transparency. Clear ingredient labeling, open communication about sourcing, and above all the presence of recognizable Turkish flavors proved essential. In fact, when insect-based elements were paired with well-loved local ingredients — such as herbs, spices, or breads deeply embedded in regional identity — acceptance rates rose markedly. The idea was no longer “eating something alien,” but “discovering a new dimension of a beloved taste.”

An intriguing convergence appears when comparing the professional and consumer datasets. Both groups placed trust and familiarity at the very center of their decision-making, suggesting that large-scale acceptance will depend less on the novelty itself and more on the manner of its presentation. Professionals spoke of the need for training, pilot programs, and clear regulatory frameworks to give them confidence before offering such dishes to their clientele. Consumers, on the other hand, sought reassurance through transparency and endorsement — whether from chefs, brands, or institutions they already respect.

Even more telling was the reduced credibility-to-action gap observed in Turkey compared to other countries in the study. Here, a credible message does not linger passively in the mind; it tends to transform into genuine intention more quickly. This quality could make Turkey a highly responsive market — provided campaigns are well-framed, culturally attuned, and led by trusted messengers.

Ultimately, the statistics do not describe a market uniformly resistant to insect-based gastronomy, but rather a society willing to explore — if the invitation is extended by the right hands, in the right language, and within the comforting borders of its rich culinary heritage.

National Barriers & Opportunities

Turkey's journey toward integrating insect-based gastronomy sits at the intersection of cultural heritage, market readiness, and regulatory evolution. Understanding the national barriers and opportunities is essential for charting a realistic path forward — one that acknowledges existing constraints while unlocking the country's unique potential.

Barriers to Adoption

1. Cultural Perceptions and Dietary Identity

Food in Turkey is inseparable from identity. The traditional Turkish diet, steeped in Mediterranean and Anatolian influences, is built on fresh vegetables, legumes, grains, meats, and a rich tapestry of spices. While Turkish cuisine has long embraced diversity through centuries of trade and migration, the concept of eating insects is largely absent from collective memory. For most consumers, it still triggers discomfort, framed as something “foreign” or “primitive,” and not aligned with the image of refined Turkish culinary heritage.

2. Lack of Market Familiarity

Unlike in some European countries where edible insects are now available in supermarkets, Turkey's retail landscape has little to no presence of insect-based products. This absence means consumers lack exposure, and without visibility, acceptance remains low. The professional sector faces the same challenge: chefs and restaurateurs have few examples to draw upon for menu integration, recipe testing, or sourcing.

3. Regulatory Ambiguity

Although Turkey aligns with certain European Union food safety frameworks, the formal approval processes for novel foods — including insect-based ingredients — remain complex and unclear. Without clear guidance from authorities, businesses face uncertainty in investment, marketing, and product development. This regulatory “grey zone” slows both innovation and adoption.

4. Risk of Perceived Western Imposition

While Turkey has embraced many global trends, there is also a degree of caution toward initiatives seen as externally driven, particularly in food culture. If insect-based gastronomy is presented as a European trend imposed from outside, resistance may deepen. This highlights the need for culturally anchored storytelling and local ownership of the narrative.

Opportunities for Growth

1. Culinary Innovation as a Cultural Strength

Turkey's culinary professionals are known for their creativity and ability to adapt traditional dishes for modern palates. This skillset is a natural asset for integrating insect-based proteins into familiar formats — whether as a subtle addition to köfte, börek fillings, or meze spreads. Such integration could make the concept more approachable without sacrificing authenticity.

2. Sustainability as an Emerging Consumer Value

Environmental consciousness is growing, especially among urban youth, middle-class professionals, and the tourism sector. Campaigns against food waste and for sustainable agriculture have already gained traction. By positioning insect-based foods within this existing sustainability movement, stakeholders can tap into a narrative that feels urgent and relevant.

3. Tourism as a Gateway for Experimentation

Turkey's role as a global tourism destination offers a unique opportunity to introduce insect-based gastronomy to both domestic and international audiences in controlled, high-quality environments. Upscale restaurants, boutique hotels, and food festivals could serve as early-stage incubators for acceptance, allowing tourists to become both consumers and ambassadors of the trend.

4. Strategic Position Between Europe and Asia

Geographically and culturally, Turkey is a bridge between continents. This position allows it to influence — and be influenced by — diverse culinary traditions. It also opens opportunities for regional collaborations, research partnerships, and export strategies that span both European and Asian markets.

5. Rising Interest in Functional and High-Protein Foods

The Turkish health and fitness market is expanding rapidly, with growing demand for protein-rich snacks, supplements, and functional foods. Insect-based products could enter this space with less cultural friction, as the target audience is already open to unconventional protein sources for performance and wellness.

Alignment with European Strategies

Turkey, while not an EU member, often harmonizes agricultural and food standards with European norms, especially in export-oriented sectors. EU food safety regulations, sustainability targets, and innovation programs are already influencing the Turkish hospitality and agrifood sectors. Aligning insect-based gastronomy with these frameworks would not only facilitate domestic acceptance but also open export channels for value-added products. Given the EU's increasing openness to insect-based foods under novel food legislation, Turkey has the opportunity to position itself as both a regional innovator and a bridge between European and Middle Eastern markets.



Strategic Recommendations for Turkey

The following recommendations translate the combined findings from the Consumers and Professionals statistical analyses, along with broader European and national context, into actionable strategies. They are designed to guide stakeholders — chefs, hospitality managers, policymakers, educators, entrepreneurs, and the wider food value chain — toward the successful and culturally resonant integration of insect-based foods in Turkey.

- **Chef-Led Innovation Campaigns** – Engage respected Turkish chefs to introduce insect proteins through beloved national dishes, supported by storytelling that blends tradition and modern sustainability.
- **Transparency-First Communication** – Prioritize ingredient clarity, sourcing transparency, and nutritional education to build consumer trust.
- **Pilot Programs in Urban Centers** – Launch targeted programs in Istanbul, Izmir, and Ankara to test consumer responses, refine recipes, and generate media attention.
- **Policy Engagement** – Collaborate with food safety authorities to clarify regulations, enabling safe experimentation in professional kitchens.
- **Cultural Framing** – Position insect-based gastronomy as part of Turkey’s long history of adaptive cooking traditions, connecting it to resource efficiency and culinary creativity.

Conclusion – Turkey’s Path in the Mind-Shifting to the New Era

Turkey’s path toward embracing insect-based gastronomy is neither a straight line nor a leap into the unknown — it is a gradual weaving of new threads into an already intricate culinary tapestry. The country’s gastronomic identity is built on centuries of adaptation, where influences from East and West, rural traditions and urban sophistication, have merged into a cuisine that is both rooted and evolving. This adaptive spirit, combined with a strong cultural respect for culinary expertise, gives Turkey a unique advantage in making the leap toward novel, sustainable ingredients.

The journey will not be without its challenges. Insects as food still sit on the edge of public imagination, framed more by exoticism than practicality. Overcoming this perception will require more than nutritional facts or sustainability statistics; it will demand stories that resonate emotionally, memories reimagined on a plate, and a clear sense that this innovation does not erase tradition but enriches it.

The data from both professionals and consumers makes one truth clear: credibility is the catalyst. When people trust the messenger — be it a chef, a respected brand, or a government body — they are more willing to explore new frontiers. Turkey’s hospitality professionals, particularly those in leading culinary roles, are therefore not just service providers but cultural ambassadors, capable of shifting perceptions one dish at a time.



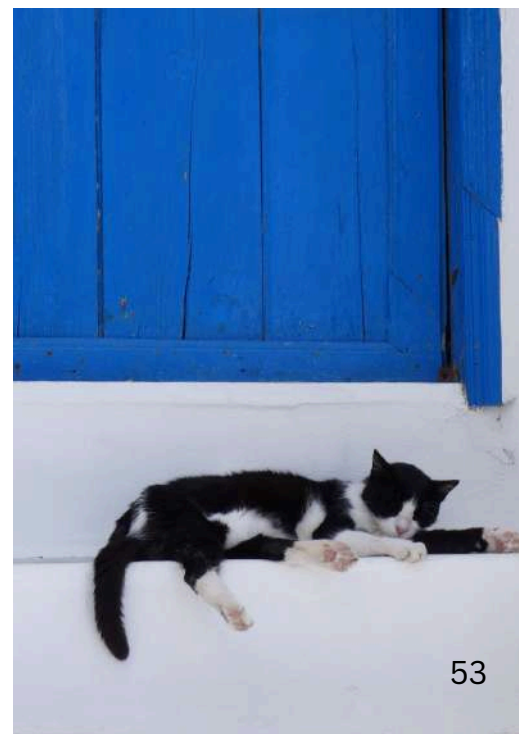
The opportunity lies in framing insect-based gastronomy not as an imported trend, but as an expression of values Turkey already holds dear: resourcefulness, respect for nature, and the transformation of simple ingredients into culinary art. This is a narrative that can bridge urban experimentation with rural heritage, linking Istanbul's cutting-edge restaurants with Anatolia's timeless cooking wisdom.

In the broader European and global context, Turkey has the chance to position itself as a bridge — a place where innovation meets tradition, and where sustainable gastronomy can be adapted for both Western and Middle Eastern palates. By engaging with European food innovation networks while retaining cultural authenticity, Turkey could not only integrate insect-based dishes domestically but also export its own interpretations to the world.

The “Mind-Shifting to the New Era” is, at its core, about redefining what is possible on the plate and in the public mind. For Turkey, success will mean not just adopting insect proteins but reimagining them in a way that feels unmistakably Turkish — wrapped in the warmth of hospitality, seasoned with trust, and served as part of a larger story of sustainability and cultural pride.



COUNTRY PORTRAIT: GREECE



GREECE

Greece, with its rich culinary heritage and deep-rooted traditions of seasonal, locally sourced food, is no stranger to the balance between tradition and innovation. Mediterranean gastronomy, anchored in fresh produce, olive oil, and a mosaic of regional specialties, has long been a cornerstone of both national identity and global culinary reputation. As the European Union accelerates its sustainability agenda, Greece faces the opportunity—and challenge—of integrating novel food sources such as edible insects into its gastronomic and environmental strategies.

Statistical findings reveal that Greek consumers show high credibility ratings for insect-based gastronomy guidelines, coupled with above-neutral shifts in attitudes and moderate-to-strong willingness to try. Notably, Greece's scores for credibility and openness surpass those recorded in Romania and Turkey, indicating a comparatively fertile ground for innovation—if approached with cultural sensitivity.

On the professional side, chefs, restaurateurs, and hospitality leaders rate all guidelines exceptionally high across feasibility, intention, and efficacy, with means consistently above 4.0. The data show near-universal readiness among Greek professionals to pilot insect-based menu items, especially when integrated subtly into familiar formats and supported by strong sensory and storytelling strategies.

The alignment of consumer openness and professional enthusiasm (both at higher levels than in several peer countries) suggests Greece can take a leadership role in piloting insect gastronomy in the Mediterranean region. The path forward will require carefully curated sensory experiences, chef-driven narratives, and strong alignment with sustainability messaging rooted in national and EU priorities.



Greece in the Context of Sustainable Gastronomy

Cultural Attitudes

Greek cuisine is a living testament to centuries of agricultural wisdom, coastal resourcefulness, and cross-cultural exchange. From the olive groves of Kalamata to the seafood markets of Thessaloniki, food is inseparable from Greek identity. Meals are deeply social events, anchored in shared plates and seasonal abundance. This communal and tradition-oriented culture fosters trust in known flavors and skepticism toward unfamiliar ones.

Qualities defining “good food” in Greece—freshness, locality, and recognizable taste—are reinforced by the strong presence of small-scale farming, island-based food economies, and robust urban farmers’ markets. As in many Mediterranean cultures, novel foods face an implicit cultural test: they must align with established sensory expectations and social dining customs.

While this might seem a barrier, Greece’s culinary history also reveals a capacity for adaptation. Greek cuisine has absorbed influences from the Balkans, the Middle East, and Western Europe, often through reinterpretation within a familiar flavor framework. This adaptability, paired with Greece’s globally recognized gastronomy, creates an opening for insect-based dishes—provided they are introduced through trusted culinary ambassadors and integrated seamlessly into traditional or modern Greek recipes.

In urban centers like Athens, Thessaloniki, and Heraklion, culinary innovation is thriving. Fine-dining venues, experimental pop-ups, and street food festivals have introduced Greek audiences to sushi, molecular gastronomy, and plant-based alternatives. Younger, well-traveled Greeks and international residents are especially open to new food concepts, making these urban hubs ideal for insect gastronomy pilot programs.

Sustainability Discourse

Environmental consciousness in Greece has grown significantly in recent years, shaped by EU environmental directives, visible climate impacts (such as heatwaves and water scarcity), and a revived interest in traditional low-waste practices. Concepts like “zero waste” and “farm-to-table” have gained traction in hospitality, though much of the sustainability dialogue still centers on renewable energy, waste reduction, and marine conservation rather than alternative proteins.

While there is growing public awareness of the environmental costs of meat production, insect-based foods remain absent from mainstream sustainability discourse. When they are mentioned, it is often in a novelty context, as in lifestyle media or travel programs highlighting exotic dining experiences abroad. This framing limits their credibility as a serious environmental and nutritional solution.



The data suggest that credibility is already high among Greek consumers when insect gastronomy is framed appropriately—offering a strategic opportunity to reposition insects from “curiosity” to “climate-smart choice.” Linking insect protein to established Greek sustainability priorities—such as reducing food imports, preserving biodiversity, and supporting rural economies—will be critical in shaping public perception.

Implications for Greece’s mind-shifting journey:

- Cultural integration should prioritize sensory familiarity and communal dining traditions.
- Sustainability messaging must connect insect protein to widely recognized environmental priorities.
- Chefs, culinary educators, and influencers can bridge the gap between novelty and normality, reframing the narrative toward sophistication and ecological responsibility.

Statistical Insights – What the Data Reveals

The Greek data paints a picture of a nation where culinary heritage and openness to innovation meet on a sunlit terrace, over a table scattered with meze plates. Both consumers and hospitality professionals demonstrate a willingness to entertain new gastronomic ideas — provided those ideas arrive dressed in the familiar language of Greek flavors, social dining traditions, and the deep cultural symbolism of food.

Among hospitality professionals, enthusiasm is almost unanimous. Every guideline tested scored at an exceptional level for feasibility and intention, with differences between them so small as to be almost symbolic. This is not the hesitancy of a market waiting for permission — it is the readiness of chefs, restaurateurs, and culinary educators who can already see where insect-based proteins might fit. The highest-scoring strategies were those that introduced these proteins subtly, framing them not as a break from the past but as an elegant continuation of it. Picture insect-enriched phyllo layers in a golden spanakopita, a rich fava purée laced with sustainable protein, or a crusty koulouri made heartier with insect flour. In these familiar forms, the concept loses its foreignness and instead feels like a modern expression of Greece’s enduring resourcefulness in the kitchen.

The professional dataset also sends a clear signal about the role of culinary authority. In Greece, chefs are more than cooks — they are cultural storytellers, often deeply connected to place, tradition, and family heritage. When respondents imagined a well-known Greek chef — perhaps one celebrated for reviving village recipes or championing Cycladic ingredients — presenting insect-based dishes as part of a sustainability journey, their willingness to embrace the concept surged. This mirrors how Greece has previously absorbed global trends: from the farm-to-table revival to the wave of creative street food, it has been chefs who carried new ideas into the public imagination, blending them seamlessly with the flavors of home.

On the consumer side, the numbers reveal a striking alignment between credibility, attitude change, and willingness to try — all three highly correlated. In Greece, once a food concept feels credible, the leap from curiosity to action is shorter than in many other markets. Credibility here is grounded in tangible assurances: trustworthy sourcing, visible quality, and open, transparent communication.

The guidelines that resonated most with Greek consumers balanced familiarity with openness. High scores clustered around strategies that combined clear ingredient labeling and sustainability narratives with the sensory comfort of recognized Greek tastes: oregano, thyme, olive oil, lemon, honey. When insect proteins were paired with these anchors, the psychological frame shifted from “eating something foreign” to “experiencing a familiar flavor in a new way.”



Interestingly, both professionals and consumers displayed a shared reliance on trust and cultural belonging as decision-making foundations. For professionals, trust was built through the promise of a stable supply chain, EU-aligned regulations, and training in preparation techniques. For consumers, trust grew in the presence of chef endorsements, transparent labeling, and the sense that this was not an imported novelty, but an idea already wearing the clothes of Greek culinary identity.

Perhaps the most revealing trait in the Greek data is how quickly acceptance can build once credibility is secured. This is a market where belief often moves toward action — especially when reinforced by strong social signals, whether from a respected chef, a trusted local brand, or a shared dining experience in a taverna courtyard.

Ultimately, the statistics do not portray Greece as resistant to insect-based gastronomy. Rather, they show a market defined by culinary pride, deep-rooted social eating rituals, and a respect for ingredients that tell a story. Here, innovation is welcomed when it feels like an authentic extension of tradition — best introduced through familiar flavors, trusted voices, and the communal spirit that has always been at the heart of the Greek table.

National Barriers & Opportunities

The story the Greek data tells is one of quiet readiness tempered by the weight of tradition. Insect-based gastronomy does not enter a cultural vacuum here; it steps into a centuries-old relationship with food that is intimate, symbolic, and tied to both land and sea. As such, the path forward is not about forcing change, but about weaving innovation into the existing fabric of Greek culinary life.

Barriers to Adoption

The strength of tradition as both anchor and gatekeeper

Greek cuisine is among the most tradition-bound in Europe. From island to mainland, recipes are passed down through families almost unchanged for generations. This deep-rooted culinary memory brings comfort — but also caution toward anything that falls outside its sensory norms. For many Greeks, “good food” is fresh, local, and immediately recognizable in taste, smell, and texture. In this context, insect proteins face the challenge of winning a place alongside olive oil, feta, lamb, and bread baked in wood-fired ovens.

Sensory and psychological resistance

Whole-insect presentations, while common in some cultures, are unlikely to appeal to a mainstream Greek audience in the near term. The mental image of an insect as “ingredient” still carries the weight of taboo, particularly in rural or conservative communities. The data make it clear: familiarity is the bridge. Ground insect flours folded into bread dough or used in pasta can bypass the initial “disgust factor” and allow curiosity to take root.

Scarcity and visibility gap

Insect-based foods are virtually invisible in Greek supermarkets, farmers’ markets, or restaurant menus. This absence reinforces the perception that they are an imported novelty rather than part of the local food ecosystem. Without repeated exposure in familiar settings, the idea risks remaining theoretical for most consumers.

Framing as “the exotic”

When insect protein appears in Greek media, it is often framed as a curiosity — a headline-grabbing oddity rather

than a serious, sustainable solution. This framing narrows the conversation, keeping it in the realm of spectacle instead of practicality.

Opportunities for Growth

Urban culinary laboratories

Athens and Thessaloniki are engines of gastronomic experimentation. Here, a new wine bar might serve Cretan cheeses alongside Japanese-inspired small plates, and no one blinks. These cities are home to chefs who are unafraid to test boundaries, and to diners who pride themselves on discovering “what’s next.” This makes them ideal incubators for chef-led pilot menus and seasonal specials featuring insect-based ingredients.

Alignment with EU sustainability narratives

Greece has a compelling case to position insect protein as a Mediterranean expression of the European Green Deal’s goals. Linking insects to reduced food imports, climate resilience, and the revitalization of rural economies can root the idea firmly in the national interest — not just as a culinary experiment, but as part of Greece’s contribution to a sustainable Europe.

Trust in culinary authority

The professional dataset shows Greek chefs already score insect-based guidelines highly for feasibility and intention. These culinary leaders can serve as translators between tradition and innovation, using their authority to reassure and inspire both peers and diners. A dish explained by a respected chef — especially one known for championing local producers — carries weight that no marketing campaign can replicate.

Integration through the familiar

The strongest opportunities lie in recipes where insect proteins hide in plain sight: bread enriched with insect flour, moussaka with a lighter yet protein-rich béchamel, dolmades with a partial insect protein blend. Such approaches let consumers taste before they judge, easing the journey from hesitation to acceptance.

Tourism as a catalyst

With over 30 million annual visitors, many from countries already exploring insect gastronomy, Greece can use its hospitality sector as a dual-testing ground — satisfying adventurous tourists while gently introducing locals to the same ideas. A well-placed tasting menu in a Santorini resort or a sustainable gastronomy event in Crete could plant seeds for broader acceptance

Alignment with European Strategies

Greece’s journey toward integrating insect-based gastronomy is not unfolding in isolation — it sits firmly within the larger European narrative of climate action, food system transformation, and sustainable economic growth. The same seas that connect Greece to its Mediterranean neighbors also connect it to the ambitions of the European Green Deal, the Farm to Fork Strategy, and the EU Protein Plan. For Greece, these policies are not abstract documents; they are pathways that could link its agricultural traditions to a new, diversified protein future.



The Green Deal and Farm to Fork: A shared vision

The European Green Deal envisions climate neutrality by 2050, and Farm to Fork is the blueprint for reshaping Europe's food systems to meet that goal. These frameworks call for reducing reliance on conventional animal proteins, cutting greenhouse gas emissions, and expanding consumer choice through alternative proteins — including insect-derived options.

For Greece, this alignment is natural. The country's agricultural sector, while a point of pride, still contributes significantly to its emissions profile. A modest shift toward insect protein could help reduce this footprint without threatening cultural food heritage. Framing insect gastronomy as an enhancement to the Mediterranean diet — not a replacement — allows Greece to claim a place in Europe's sustainability story while preserving its culinary identity.

The EU Protein Plan: From island farms to protein innovation

The EU Protein Plan aims to boost Europe's self-sufficiency in sustainable protein production. For Greece, this could mean supporting insect farming in rural regions, including islands where climate variability challenges traditional crops. Insect farming's modest land and water requirements make it well-suited for these environments, and the by-products can even feed back into agriculture as natural fertilizers. This diversification could open up new income streams for farmers while building a homegrown supply chain for insect-based ingredients.

Horizon Europe and Erasmus+: Knowledge as currency

Research and training are critical to making insect gastronomy viable. Programs like Horizon Europe can support R&D on flavor optimization, food safety, and sensory acceptance tailored to Greek palates. Meanwhile, Erasmus+ can fund culinary exchange programs, connecting Greek chefs and educators with peers in countries where insect gastronomy is further along — fostering skills, confidence, and creativity in adapting recipes for local audiences.

The Circular Economy Action Plan: Closing the loop

Greece's agricultural processing sector generates substantial organic by-products — olive pomace, grape skins from winemaking, vegetable trimmings. Under the Circular Economy framework, these waste streams could be repurposed into high-quality insect feed, creating a closed-loop protein production model that aligns perfectly with EU waste reduction goals. This is not just about efficiency; it's about reinforcing the Greek value of *meden agan* — nothing in excess, nothing wasted.

EFSA and the Novel Foods Regulation: Regulatory clarity

The European Food Safety Authority's approvals for several insect species under the Novel Foods Regulation create a harmonized legal pathway. For Greece, this means that once national labeling and inspection systems are aligned, market entry can be swift. EU experience shows, however, that regulation alone is not enough. Countries like the Netherlands and Belgium have paired legal readiness with chef-led campaigns and visible public engagement — a playbook Greece could adapt for its own cultural context.

Strategic positioning in the EU context

If approached thoughtfully, Greece could position itself as:

- A Mediterranean pilot market demonstrating how insect proteins can be woven into a strong, tradition-led culinary identity.

- A production hub for insect ingredients, leveraging rural economies and island agriculture for both domestic use and export.
- A training and knowledge center through its VET and culinary institutions, offering Mediterranean-specific expertise in sustainable protein innovation.

By aligning with these European strategies, Greece can transform insect gastronomy from an abstract policy goal into a lived reality — one that not only reduces environmental impact but also deepens the cultural richness of the Greek table.

Strategic Recommendations for Greece

The data, the cultural realities, and the European policy environment all point in the same direction: Greece has the conditions to become a leader in Mediterranean insect gastronomy. But leadership here will not come from forcefully pushing change — it will come from weaving new practices into the fabric of Greek food culture, one familiar flavor, one trusted voice, and one shared table at a time.

For Chefs and Hospitality Professionals

Chefs are the natural bridge between innovation and acceptance in Greece. Their kitchens are both creative studios and cultural stages, and the public trusts them to introduce new ideas without betraying tradition.

- Start where trust already lives – Introduce insect proteins in dishes that feel unmistakably Greek: spanakopita enriched with insect flour, dolmades with a light insect-protein blend, a village-style bread that is subtly fortified. These are foods that feel like home — but carry a quiet new story.
- Elevate through narrative – Connect these dishes to Greek agricultural resilience, to the shepherd who uses every part of the harvest, to the fisherman who respects the limits of the sea. Position insects not as “exotic imports” but as the next chapter in Greece’s long history of resourcefulness.
- Create tasting experiences – Host intimate dinners, mezze samplings, or chef’s table events where guests can experience insect-based dishes with guided storytelling. Pair with Greek wines, tsipouro, or herbal teas to anchor the flavors in local terroir.

For Policymakers & Regulators

Policy will shape not only the speed but the legitimacy of insect gastronomy’s introduction in Greece. Support here must be visible, consistent, and tied to broader national priorities.

- Build a public awareness campaign – Tie insect protein to themes of climate resilience, rural revitalization, and Greek agricultural pride. Use respected chefs, farmers, and scientists as messengers.
- Support the production base – Offer grants, microloans, and tax incentives for farmers and agri-entrepreneurs to enter insect farming, particularly in rural or island regions where traditional crops are under pressure.
- Lead by example in public procurement – Introduce insect-based foods in pilot programs for schools, hospitals, and public institutions — framed as part of Greece’s sustainability commitments.

For Entrepreneurs & Food Start-Ups

The Greek entrepreneurial scene, especially in food, thrives on stories of tradition meeting innovation. Insect-based products can fit naturally into this narrative if targeted and branded well.

- Focus on discreet formats – Protein bars for hikers, pasta for home cooks, baked goods for cafes. Let the function (high-quality protein, sustainability) carry the message more than the form.

- Build alliances in tourism and retail – Partner with resorts, eco-hotels, and specialty shops that cater to both adventurous tourists and conscious locals.
- Think export as well as domestic – Use Greece’s reputation for quality food exports to introduce insect-based ingredients into markets that are already primed for them.

For Educators and VET Institutions

Education is where new skills and attitudes can be seeded for the long term. Culinary schools and vocational training centers can turn today’s students into tomorrow’s ambassadors.

- Integrate insect gastronomy modules – Teach not just preparation techniques but also the science, nutrition, and sustainability context behind insect proteins.
- Encourage hands-on learning – Organize visits to insect farms, host competitions where students create Greek-inspired insect dishes, and invite international guest chefs to share experiences from more advanced markets.

For Media & Influencers

- Media shapes perception long before a plate reaches the table. The right framing can make the difference between novelty and legitimacy.
- Shift the tone from shock to sophistication – Replace “look what they’re eating” headlines with features on sustainability, artisanal preparation, and culinary artistry.
- Spotlight local pioneers – Tell the stories of Greek farmers experimenting with insect rearing, of chefs crafting recipes that marry innovation with heritage, of consumers who’ve made the leap and loved it.

Conclusion – Greece’s Path in the Mind-Shifting to the New Era

Greece stands at a rare intersection where tradition, innovation, and policy alignment converge. The statistics reveal not a hesitant market, but one with a foundation of credibility, trust, and professional readiness. Consumers are open — sometimes cautiously, sometimes enthusiastically — when new ideas are anchored in the familiar and carried by trusted voices. Professionals, for their part, are already poised to experiment, viewing insect-based gastronomy not as a gimmick but as an opportunity for creative expression, sustainability, and differentiation.

This convergence mirrors the country’s own culinary history. Greek cuisine has always evolved through the gentle integration of new influences — spices from the East, techniques from the West, agricultural innovations from its own islands and mountains. Insect proteins, if framed and introduced with the same respect for heritage, can become another chapter in that story.

From a European perspective, Greece is well-positioned to be more than just an adopter. Its rich agricultural heritage, thriving urban food scenes, and deep-rooted tourism industry offer the platforms needed to lead in the Mediterranean region. With the Farm to Fork Strategy, the EU Protein Plan, and Circular Economy principles as guiding frameworks, Greece can align culinary innovation with climate resilience, rural revitalization, and economic diversification.



But this path will not be forged by policy alone. It will require chefs who can weave new ingredients into dishes that feel timeless, educators who equip the next generation with skills and confidence, entrepreneurs who see opportunity in sustainable production, and media voices who shift the narrative from shock to sophistication. Above all, it will demand collaboration — across ministries, industries, and communities — to ensure that insect-based gastronomy takes root not as a novelty, but as a natural extension of the Greek table.

If Greece succeeds, it will not only diversify its protein sources and strengthen its food security; it will also reaffirm a timeless truth of its own culture: that the Greek table is both a guardian of heritage and a welcoming host for the future. In this way, Greece's mind-shift will be less about replacing what is cherished, and more about expanding what is possible — ensuring that tradition and innovation can, as they have so often before, share the same plate.

CLOSING REMARKS

A European Mindset Shift in Motion: From Parallel Paths to Collective Acceleration

As we move beyond national borders and examine the six reports in unison, a deeper, pan-European pattern begins to emerge—one that reveals not just differences, but a powerful convergence. While each country has its own culinary traditions, societal attitudes, and levels of market maturity, all are participating—at varying speeds and intensities—in a continental shift in how food sustainability, protein diversification, and culinary innovation are understood and embraced.

This chapter explores that emerging cohesion. It distills the findings of Cyprus, Greece, Italy, Romania, Spain, and Turkey into shared dynamics, highlights strategic accelerators for change, and offers a unified framework for scaling the adoption of insect-based gastronomy as a European movement, not just a local experiment.

Shared Drivers of Change

Despite geographic, economic, and cultural differences, the country reports illuminate a series of common levers that consistently shape openness to insect-based gastronomy.

1. Credibility Converts Curiosity into Action

Across all six countries, statistical correlations show that when a guideline is perceived as credible, it reliably influences both attitudes and behavior. In markets like Turkey and Spain, this credibility-to-action link is particularly strong. Consumers are not inherently resistant—they are risk-sensitive. When the information is endorsed by chefs, educators, or trusted institutions, the psychological leap from curiosity to consumption narrows significantly.

2. Professional Sectors Lead Consumer Mind-Shifting

In every country studied, hospitality professionals scored insect gastronomy more favorably than consumers. Chefs, culinary educators, and food entrepreneurs appear more ready to experiment—especially when guidelines align with their operational realities and creative ambitions. This suggests a clear opportunity: the supply side is already ahead. Strategic support can empower professionals to pull public opinion forward through demonstration, menu innovation, and direct engagement.

3. Familiar Formats Build Bridges

Whether in Romania, Greece, or Spain, guidelines that recommend subtle integration—such as insect-enriched bread, pasta, sauces, or pastries—consistently rank higher than those promoting overt presentation of insects. This is not about



What emerges is not fragmentation—but diverse readiness across complementary axes:

- Spain and Greece offer creative leadership and high professional momentum.
- Italy and Romania show the importance of educational systems and operational clarity.
- Cyprus and Turkey provide fertile ground for guided experimentation and pilot testing.

Together, these countries map a functional landscape for continental acceleration—each one offering strengths where others face gaps, and each one contributing to a shared European identity built on resilient food systems.

By observing the unique traits of each country, we begin to see how they complement each other—and where joint European strategies could amplify success:

Country	Cultural Identity	Consumer Readiness	Professional Readiness	Strategic Entry Points
Cyprus	Mediterranean, tradition-rooted, emerging urban interest	Uniform receptivity, limited exposure	High general openness, undifferentiated scores	Urban pilot programs, public awareness campaigns
Greece	Deep-rooted cuisine, pride in tradition + adaptability	High credibility + willingness to try	Very high feasibility and intention to apply	Chef-led storytelling, sustainability reframing
Italy	Culinary conservatism + premium on quality	Moderate trial willingness, low behavior conversion	High efficacy perception, operational hesitations	Integration into VET, operational pilots
Romania	Traditional with fast-growing urban innovation	Moderate openness, strong age divide	Supply-side enthusiasm, cautious about consumers	Targeted pilots in urban centers, influencer education
Spain	Culinary pride + experimental history	Quick behavioral transition once credibility established	High intention, feasibility, and creativity	Chef-driven tasting menus, media normalization
Turkey	Cross-cultural identity, religious and cultural complexity	High correlations between belief and action	High professional interest with cautious pragmatism	Trusted chef campaigns, tourism-based rollouts

Stakeholders for Acceleration: Who Needs to Do What

The findings across the six reports converge into a call for multilevel coordination. Mind-shifting does not happen in a vacuum. It requires action from five core stakeholder groups—each with a distinct but interdependent role.

1. Chefs and Culinary Innovators

- Act as early adopters and cultural translators.
- Integrate insect-based proteins into recognizable dishes.
- Host pop-up tastings, live demos, and storytelling campaigns.

2. VET Institutions and Educators

- Develop curricula on sustainable gastronomy and alternative proteins.
- Offer hands-on modules on insect-based cooking and sourcing.
- Integrate behavioral science into training (trust, perception, storytelling).

3. Local and National Policymakers

- Clarify regulatory frameworks under the Novel Foods Regulation.
- Offer startup support and labeling guidance.
- Include insects in national food strategies and green public procurement.

4. Media, Influencers, and Food Communicators

- Reframe insects as sustainable, elegant, and intelligent—not weird.
- Spotlight chefs, farmers, and young entrepreneurs experimenting with insect-based food.
- Normalize rather than exoticize the narrative.

5. Entrepreneurs and Agri-Food Businesses

- Focus on processed, ready-to-use formats (flours, snacks, ingredients).
- Partner with chefs, retailers, and tourism operators.
- Target both domestic and export markets.

Toward a Continental Movement

In sum, what this report reveals is not just a series of promising local initiatives—but the early architecture of a pan-European transformation. Insect-based gastronomy is not a trend; it is a multidimensional solution space at the intersection of:

- Climate adaptation
- Food innovation
- Economic diversification
- Cultural evolution

Toward a Continental Movement

Each country contributes uniquely to this journey. Together, they form a mosaic of momentum—a living proof that mind-shifting is not just possible, but already happening.

As we approach the final chapter, one insight becomes undeniable: Europe is not merely exploring whether edible insects belong on the plate—it is actively redefining what it means to eat well, act wisely, and think beyond the expected in the name of collective future resilience.

CONCLUSION

From Novelty to Normality: The Quiet Revolution Already Underway

It often begins in silence.

Not with grand announcements or sweeping reforms, but with the subtle flicker of a new idea entering an old kitchen. A chef picking up a bag of cricket flour out of curiosity. A culinary student hearing, perhaps for the first time, that protein can come from something other than meat, beans, or dairy. A consumer, hesitant at first, taking a bite of something unexpected — and realizing it tastes... familiar.

This is how mind-shifting begins. Not with confrontation, but with conversation. Not by breaking tradition, but by slowly, deliberately expanding it.

Over the course of this report, we have traveled across six countries — each with its own culinary soul, its own tempo of change. And yet, through Cyprus's balanced receptivity, Greece's professional confidence, Italy's thoughtful tension between heritage and innovation, Romania's urban experimentation, Spain's chef-led momentum, and Turkey's bridging of continents and cuisines, something remarkable comes into focus:

Europe is changing — one forkful at a time.

A New Map of Culinary Possibility

For years, the idea of insect-based food was wrapped in a veil of novelty. It was something to marvel at on documentaries, something served at daring food festivals, something whispered about in scientific circles as “the future.”

But now, that future has started quietly taking root in the present.

Not everywhere, and not all at once.

But enough.

Enough chefs are curious. Enough professionals are ready. Enough consumers are willing — provided the approach is right.

And perhaps most importantly, enough stories are being told. Because this shift was never about insects alone. It was always about the meaning of food: what we allow on our plates, who we trust to bring it there, and how we decide what counts as “normal” in a world that desperately needs new normals.

Across every country, we heard the same refrain — not always in the same words, but in the same tone:

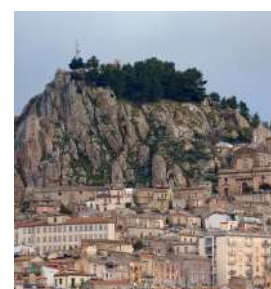
“If it’s introduced with care, I’d try it.”

“If my favorite chef used it, I’d be open.”

“If it helps the planet and still tastes good... why not?”

And that’s the heart of it. Most people are not closed.

They’re just waiting for someone they trust to go first.



Trust. Familiarity. Curiosity. These Are the Ingredients of Change.

This is not a revolution of disruption. It's a revolution of reintroduction.

Because insects, after all, are not new. They are ancient. Eaten in dozens of cultures across time, across continents. What's new is our willingness to see them not as exotic intruders, but as smart, elegant solutions — especially when they're dressed in the clothing of local flavor and tradition.

A lentil stew enriched with sustainable protein.

A loaf of bread that's just a bit heartier, a bit bolder.

A chef's special that surprises not with what it is, but with how deeply it resonates.

And that is where this quiet revolution becomes something greater.

When innovation no longer stands apart from heritage, but walks beside it.

When sustainability isn't a sacrifice, but a celebration.

When normality expands to include what once felt unthinkable.

Where We Go From Here

No one country has it all figured out. But together, a path is forming — paved not by one strategy, but by overlapping signals:

- Urban centers leaning into experimentation.
- Professionals eager to test, teach, and lead.
- Consumers who move quickly from belief to behavior when credibility is present.
- And most of all: a shared understanding that the change we need must taste good, feel familiar, and be explained in language people trust.

What comes next is not a campaign. It is a continuum.

Chefs will need support — not only with ingredients, but with visibility, recognition, and community.

VET institutions must not wait for the trend to become mainstream before teaching it — they must help shape that mainstream.

Policy must not only allow for this shift — it must be bold enough to champion it.

And media must tell stories that treat insect gastronomy not as a dare, but as a dignified, delicious evolution of European food culture.

A Final Thought: Food as Future

At the end of this project, one thing is clear:
We are no longer at the beginning.

The first menus have been written.
The first tastings served.
The first attitudes shifted.

We are already mid-step in a longer journey — not just toward new ingredients, but toward new ways of thinking about food, nature, and ourselves.

Mind-shifting does not ask us to abandon what we love.
It asks us to love more wisely, more widely, more courageously.

To look at the world's resources not with fear, but with creative resolve.
To trust that the wisdom of tradition can hold hands with the demands of tomorrow.
To know that resilience, just like a recipe, is something we build, one ingredient at a time.

And so, we close this chapter not with an end, but with a beginning.

Because somewhere, as you read these words, a young chef is plating something new.
A family is trying something they never thought they would.
And someone, somewhere, is saying:
"It's different... but I'd eat that again."

That's how it begins.
That's how it spreads.
That's how we shift the era — from novelty to normality.



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MIND-SHIFTING TO THE NEW ERA



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