From Science to Strategy:

Insights from the 'Advancing Food Systems in Europe' Event

Organized under the Polish Presidency of the Council of the European Union, the event ***"Advancing Food Systems in Europe"*** brought together leading figures in science, policy, and innovation to shape the future of food systems across Europe—emphasizing **health, sustainability, trust, and cross-sector collaboration**. The event exemplified how Poland's and European research is contributing to diet-centred disease prevention, sustainable agriculture, and responsible innovation across Europe. It also offered an opportunity to **discuss policy priorities and directions for food research in the coming years**, incl. Poland's contributions to FutureFoodS Partnership under Horizon Europe.

On 17 March 2025, the *"**Advancing Food Systems in Europe - research & innovation for healthier, sustainable and resilient future***" event brought together leading researchers, innovators, policy-makers, and entrepreneurs in Brussels to explore the future of food in Europe. With a focus on research and innovation for healthier, more sustainable, and resilient food systems, the full-day event featured expert panels, keynote speeches, and dynamic sessions on consumer trust, technological innovation, and policy direction. Through collaborative dialogue and knowledge exchange, the gathering showcased pioneering scientific advancements and practical solutions aimed at transforming the European food landscape for the better.

Polish Science Contact Agency of the Polish Academy of Sciences in Brussels (PolSCA Office) was among proud co-organisers of the conference, along the **East Poland House** and the **NCBR Office in Brussels**.

Keynote: Consumer Trust as the Cornerstone

The day opened with a keynote address by **Prof. Klaus G. Grunert** (Aarhus University), leader of the **EIT Food Consumer Observatory** and one of Europe's foremost experts on food consumer behaviour. His remarks struck at the heart of food innovation challenges:

"Consumers seek information, but they need clear information. **Trust comes from transparency and simplicity.** Our role is to guide them by making choices accessible without overwhelming them." — *Prof. Klaus G. Grunert*

His call to action set the tone for the event: scientific credibility, clear communication, and inclusivity are crucial if innovations are to earn widespread public acceptance.

SESSION I – From Research to Better Health

Moderated by **Bożena Podlaska** (National Contact Pont at the NCBR), Session I highlighted how Polish and European researchers are tackling health through science:

- **Prof. Magdalena Frąc** (Institute of Agrophysics PAS) introduced research on the critical role of soil and plant microbiomes in supporting sustainable food production, emphasizing that healthy plants rely on complex metabolic cooperation with microbial communities. Her work demonstrates how microbial diversity acts as both a biomarker and a preventive factor against plant diseases, and how managing these microbiomes can enhance resilience to pests, pathogens, and environmental stresses—paving the way for biotechnological solutions in organic and climate-adapted agriculture.
- **Prof. Katarzyna Socha** (Medical University of Białystok) explored the development and application of functional foods in nutritional interventions aimed at preventing and managing non-communicable diseases such as insulin resistance, type 2 diabetes, cardiovascular disorders, and psoriasis. Her research includes the creation of innovative products—like antioxidant-rich foods and dietary supplements that not only enhance health but are validated through nutritional studies and clinical-style trials. She emphasized the need for collaboration with the food industry to bring these science-based, health-promoting products to broader populations.
- **Prof. Carsten Carlberg** (Institute of Animal Reproduction and Food Research PAS / InLife) presented epigenetic insights into vitamin D's role in healthy aging, highlighting how vitamin D functions as a molecular switch regulating over 1,000 genes, influences immune cell development, and can be used to personalize health interventions based on individual response indices. He emphasized that while genetics plays a role, lifestyle and environmental factors—like nutrition—are key drivers of biological aging, offering tangible pathways for preventing non-communicable diseases through conscious, science-backed choices. In his talked, he was referencing work done within the EIT Food R&I community.

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*TAKE A NOTE: as the next step towards efficient R&I collaboration consider joining the upcoming **CARE4BIO Brokerage Event, taking place in Warsaw on 27 May 2025**. The event is designed to support the formation of consortia for Horizon Europe's 2025 Cluster 6 calls, offering one-on-one matchmaking sessions, networking opportunities, and the chance to present project ideas. Early registration is highly encouraged, as places are limited. To learn more and secure your spot, visit: https://www.b2match.com/e/care4bio-2025.*

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SESSION II – Food-Tech and Innovation in Practice

Led by **Dr. Adam Adamek** (EIT Food), Session II showcased how startups are translating science into solutions. Staring with valuable inputs shared by **Paweł Harycki** (EIT Food) on the importance of health-focused food innovations, the members of the panel showcased how Polish and other European startups are solving real-world challenges in food production.

- **PROBIOS (Poland) represented by Jarosław Turek**: Pioneering fermentation techniques that extend food shelf life by 42%.
- **Živá Záhrada (Slovakia) represented by Lucia Balak**: Connecting 380+ farmers in a regenerative, local food network.
- **NutriDesign Lab (Poland) represented by Justyna Moskwa**: Designing **personalized nutrition solutions** based on medical science.
- **Agribot AI (UK) represented by Chris Knight**: Leveraging satellite tech and AI to optimize yields and reduce agricultural waste.

These initiatives demonstrate the **synergy of research, entrepreneurship, and sustainability** in advancing food systems.

SESSION III – Rethinking Policy: Research for Real Impact

Moderated by **Claude Yven** (FutureFoodS Partnership / ANR), the final session was a deep dive into how European research and innovation policy must evolve to meet tomorrow's food challenges. The panel discussion featured **Rosalinda Scalia** representing the European Commission's DG Research and Innovation, **Alessandro Gallina** representing JPI Healthy Diet, Healthy Lives, **Iwona Kieda** representing FOODforce Network and **Paweł Chmieliński** affiliated at the Institute of Rural and Agricultural Development PAS.

Drawing from a broad and engaged discussion, **several consensus points emerged**:

- There is an urgent need for additional R&I support, particularly targeting post-harvest stages of the food system.
- Trust remains a central issue—not only in new products but in governance. Participants emphasized that research must involve citizens, producers, and policymakers through living labs and policy labs, with a specific focus on vulnerable populations often left out of innovation processes.
- The FutureFoodS Partnership is developing a knowledge hub of living labs to share good practices and amplify citizen engagement.

A forward-looking recommendation emerged: the current Horizon Europe framework, organized in separate clusters, should evolve toward a cross-cluster, co-creation model that reflects the systemic nature of food. This transformation would require empowering researchers to work beyond disciplinary boundaries, as advocated by **Paweł Chmieliński** (Institute of Rural and Agricultural Development PAS) involved directly in initiatives like **FoodPathS CSA**.

In parallel, Polish institutions like the Institute of Animal Reproduction and Food Research PAS were praised for models that engage researchers with local SMEs, helping tailor research infrastructure to real-world needs as presented by **Iwona Kieda** (InLife PAS).

Finally, the session reaffirmed that public funding must remain the cornerstone of food and health research, as reliance on private-sector financing raises ethical concerns, particularly around vulnerable communities and public health.

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During the discussion Iwona Kieda (InLife PAS), the only Polish member of the FOODforce Network, mentioned the key messages to be included in the network's position paper for FP10 – now the document has been published and can be accessed via the link below: ***Strengthening the role of food science in FP10.***

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Poland's Expanding Role in EU Food Research

Throughout the event, **Poland's growing leadership** was evident. From pioneering research in agri-food and nutrition to active involvement in shaping EU strategic partnerships, Polish institutions are at the forefront of a collaborative, responsible transformation of food systems.

The event ***"Advancing Food Systems in Europe"*** *successfully* demonstrated how scientific evidence, ethical innovation, and citizen trust are the building blocks of future-proof food systems. As Europe enters the next research programming period, **Poland's voice - as a food-producing nation & research leader in the field - is both timely and essential**.

While Poland as a Member State has not yet formally joined the **FutureFoodS co-funded partnership under the Horizon Europe**, the active involvement of the Institute of Animal Reproduction and Food Research PAS (InLife) as one of the key research partners in the consortium, clearly highlights the country's R&I community readiness and scientific potential—making a compelling case for Poland to take the next step and secure co-governance role in this strategic European initiative.

PolSCA PAS Offices in Brussel continues to advocate for Poland to become a strategic and implementing member of the FutureFoodS Partnership, as this would consolidate the momentum, turning individual excellence into national strategic leadership—unlocking funding, impact, and voice in the European food systems transformation. There are compelling reasons to believe that joining the partnership would bring **strategic, scientific, economic, and societal benefits**, especially given its status as a major food-producing country with growing R&I capabilities. These are:

- Strategic influence in shaping the EU food policy & research priorities
- Increased access to funding and collaborative projects under Horizon Europe
- Stronger support for Polish scientists and innovators as well as research institutions
- Accelerating regional development and innovation ecosystem growth
- Bridging policy, science & society in line with EU missions