



CATALYSE

Catalysing scientific innovation into food safety action

Bridging Science and Practice: Insights from the CATALYSE Pilot Chapters on Dairy and Alternative Products

Helena Stoffers, Ghazal Nemati & Noemie Matthey



Co-funded by
the European Union

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them. Project number 101136754.

Project funded by



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Education,
Research and Innovation SERI



UK Research
and Innovation

This project has received funding from UK Research and Innovation (UKRI)

Introduction: Food Safety

Food safety is a critical aspect to **ensure** that the food we consume is **free** from harmful **contaminants**.

According to the WHO, contaminated food causes **600M cases of foodborne diseases** and **420K deaths** every year, resulting in **33M healthy life years lost**, and this is possibly an underestimation.

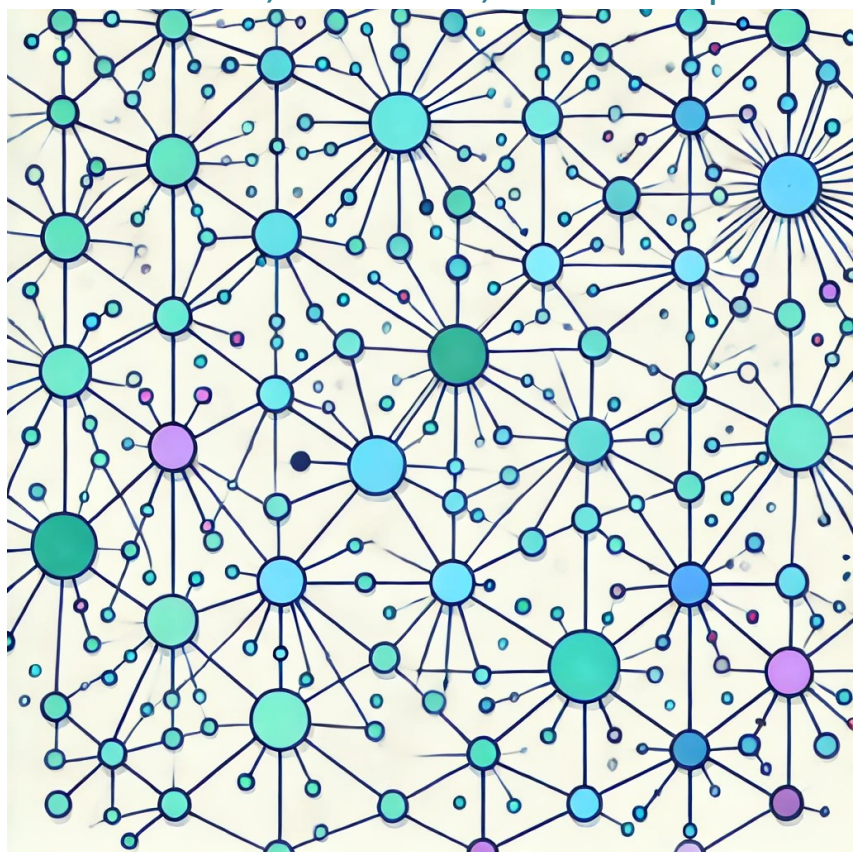


A 2019 World Bank report states US\$110B is **lost** each year in **productivity** and **medical costs** due to unsafe food in low- and middle-income countries.

Contaminated product recalls affect benefits and create food waste.

What is our challenge in food system?

Building Bridges Across Authorities,
Industries, Academia, and Startups



Facilitate & Educate

Sorting, Validating, and Simplifying the
Abundance of Information



Collect & Translate

Main facts

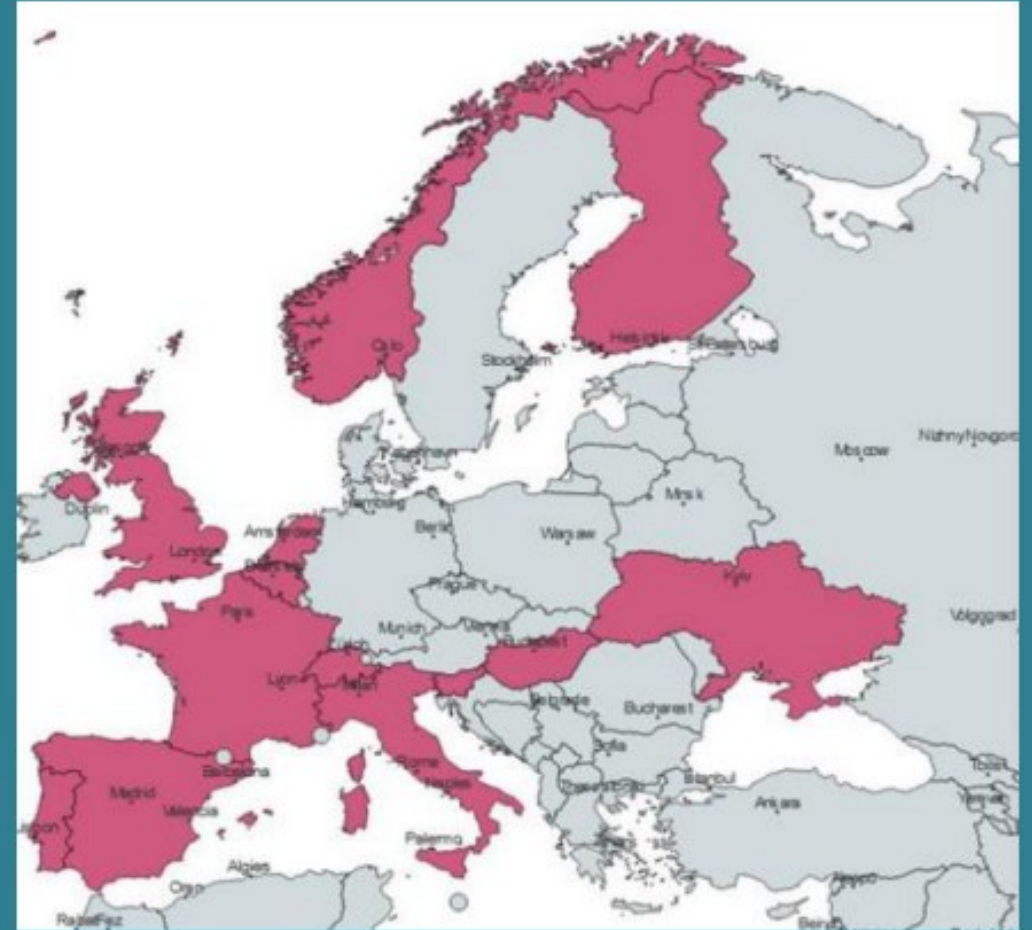
Call: HORIZON-CL6-2023-FARM2FORK-01-12

Thematic network ensuring food safety by translating research & innovation into practice

3 years project: 01/01/2024 - 31/12/2026

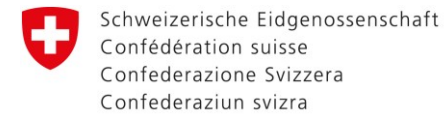
17 partners representing the food system (research and academia, industry associations, national regulatory bodies)

13 countries (Italy, Portugal, Belgium, The Netherlands, Norway, Spain, Hungary, Finland, Slovakia, United Kingdom, France, Ukraine, Switzerland)



Consortium

Project Coordinator



Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
Agroscope



CATALYSE – Working model

EXPECTED RESULTS

1. Prioritised list with needs from end-users
2. List of high potential innovations
3. Searchable knowledge database
4. Vivid **Community of Practice**
5. High quality education program
6. Better connections between end-users and innovators
7. **Improved uptake of new innovations in food safety**

COLLECT
Compile past, ongoing, and future food-safety related projects and identify food chain limitations and expectations to anticipate suitable implementation.

TRANSLATE
Bridge the gap between theoretical knowledge and practical policy by translating innovative solutions into pragmatic, applied solutions.

FACILITATE
Establish a unified networking platform for stakeholders to share information and follow up on innovations and their implementation progress.

EDUCATE
Raise critical issues within the food chain to technical audiences and simplify scientific concepts to non-scientific audiences.



Community of Practice (CoP)

“CoP are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.”

Etienne Wenger

This community collaborates to learn, exchange experiences and improve their skills.

Give voice to the stakeholders/members in the CoP



Agroscope's CoP Living Model: A Pilot in Dairy & Cheese Community

- Farmers & Producers
- Agencies & Associations
- Authorities
- Universities



75%

Market Reach

Swiss cheese dairies
using Agroscope's
microbial cultures

600+

Annual Consultations

Direct support to
producers

50+

Training Sessions

Knowledge transfer
each year



Collection of recent Publications Shared with the CoP

Selection of 120 practical publications for the CoP homepage Dairy & Alternatives

Mineral Oil Hydrocarbons in Dairy Products

Table of Contents

- Introduction 1
- Use and Input Sources 2
- Limits and Benchmarks 2
- Toxicity and Analytics 4
- Data Situation 6
- Conclusions 7

Author

Jan-Erik Ingenhoff



Introduction

For some time now, mineral oil hydrocarbons in foods have been the subject of intense discussion. Also regularly confronted with measurable residues of mineral oil hydrocarbons, the dairy sector is being called upon to determine potential input sources and to use targeted measures to prevent their transfer to foods.

The term 'mineral oil hydrocarbons' (MOH) describes a complex mixture of various substances containing between 10 and 50 carbon atoms. According to their nature, MOH are divided into two groups: 'MOSH', which represent the fraction of mineral oil saturated hydrocarbons, consisting of paraffins and naphthenes, and 'MOAH', which represent the mineral oil aromatic hydrocarbons substance group.



Agroscope Magazine

Publications

- A hazard Does Not Always Equate to a Risk. Cronobacter is a rare opportunistic pathogen and the greatest risk is only for a small sub-population of infants and only associated with powdered infant formula or human breast milk.
- Cool-effectiveness of interventions toward improving microbial food safety of chicken meat along supply chains in Burkina Faso and Ethiopia
- Inactivation of Salmonella, Enterococcus faecium and natural microbe on dry food matrices with microwave-driven plasma-processed air.
- Systematic risk ranking of microbiological hazards in infant foods.
- Ranking factors affecting the decontamination efficacy of non-thermal plasma: The approach of dissipated power per plasma volume through machine learning modeling.

Good Farming Practices

Agroscope good food, healthy environment

Agroscope Transfer

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
Agroscope

Agroscope Science | No. 197 / 2024

FACE Conference 2023

Opportunities and risks for raw milk products
A Scientific synthesis of the 2023 Conference of the FACENetwork

Authors
Hans-Peter Bachmann, Walter Bisig, Marie-Therese Fröhlich-Wyder (Scientific Programme Committee)

Partners
Fromarte, Grangeneuve

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
Agroscope

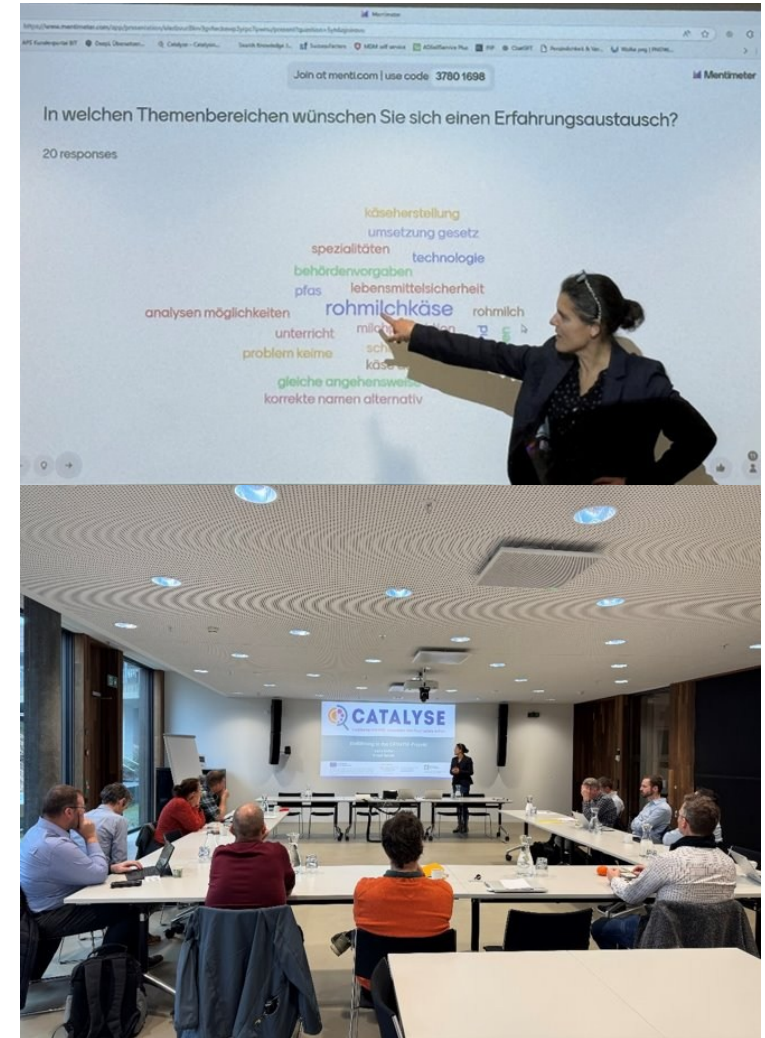
Agroscope good food, healthy environment

Agroscope Science

Engaging Stakeholders: CoP Exchange on Needs and Expectation

Presenting the CoP Model for Industries, Associations, and Communities of Practice in Switzerland in events:

- Semi-Hard cheese and dairy Associations 02.12.24 - regional consultants and regional laboratories
- Industry Engagement Day 09.11.24
- Agroscope Consultant & Association Symposium 27.01.25



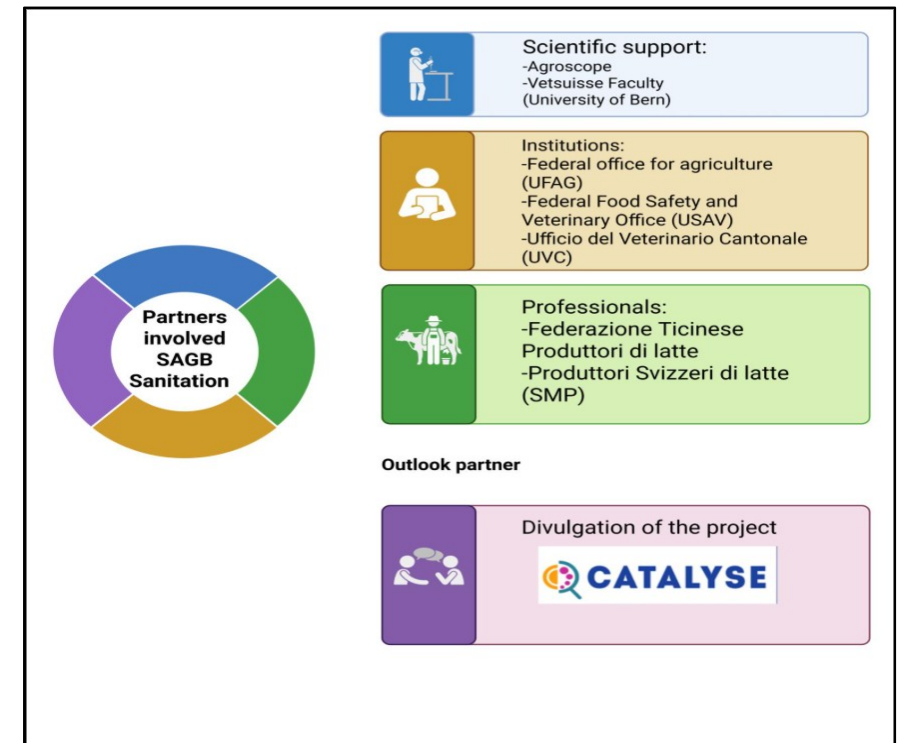
Key Topics Identified from Interviews and Surveys

- Digitalization & AI
- new tools for monitoring and detecting hazards
- food safety regulation and compliance
- hygiene by design
- food safety culture
- emerging risks

Case Study: from Innovation Mastitis Sanitation to Practices



Coming : Frontiers | veterinary science – community case study



Sources and screening of the training material

Screening of online educational and training materials for Food safety relevance

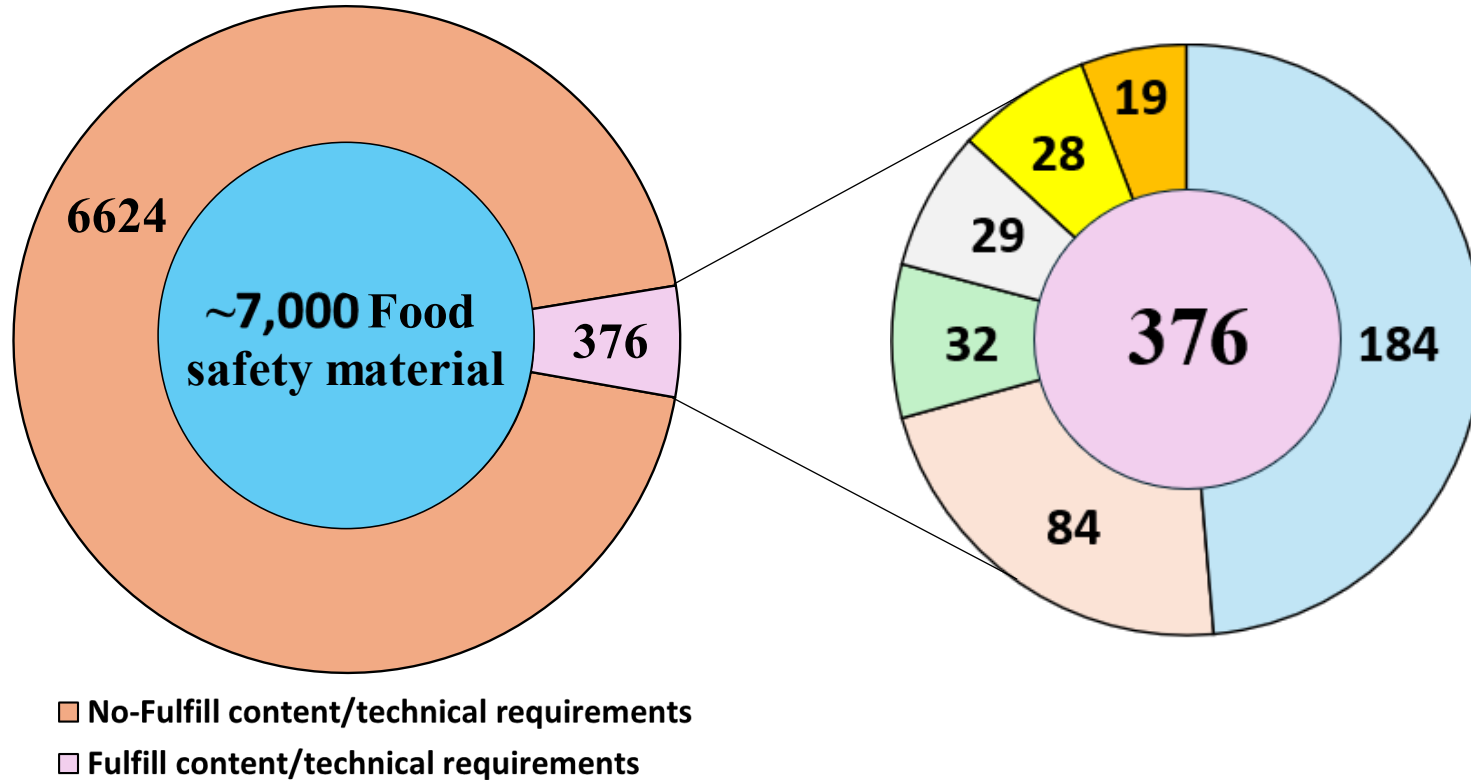


- Clips
- Videos
- Webinars
- E-books
- Online tools
- Podcasts
- Tutorials
- Online food safety education material packages

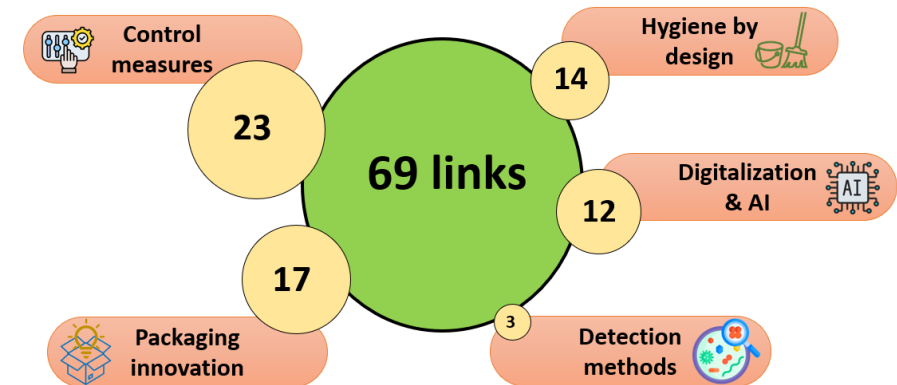
Produced by 150 different organisations

Sources and screening of the material

Based on **single-reviewer** evaluation



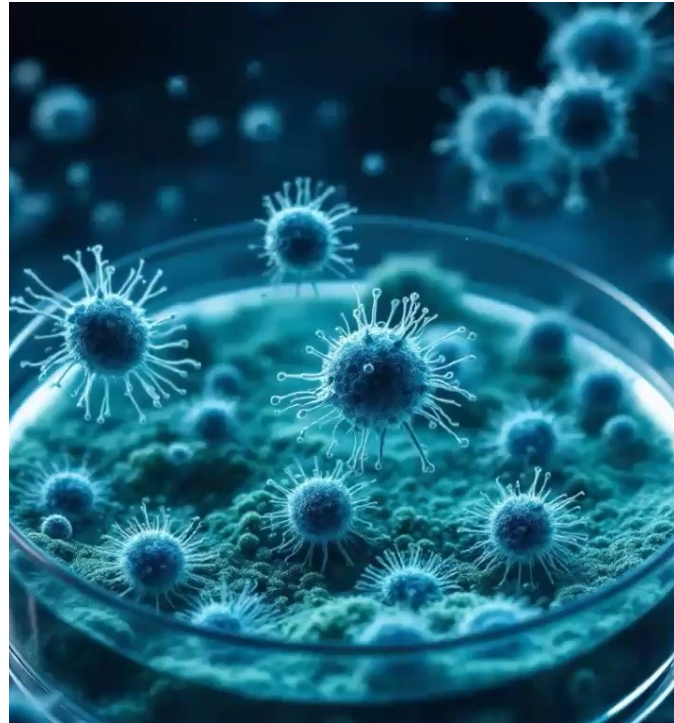
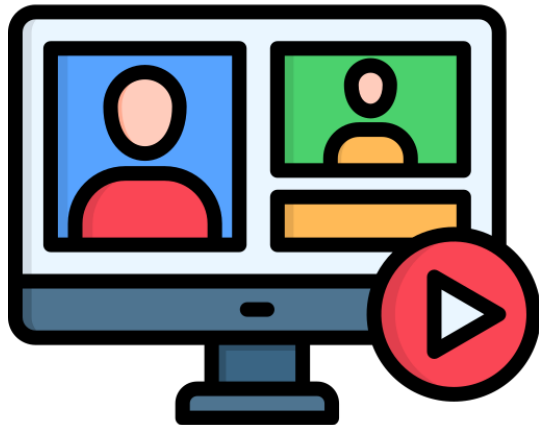
- Control measures
- Digitalization and AI
- Hygiene by design
- Packaging innovations
- Detection methods
- Others



Development of new educational material

- **Webinars:**

- Tools to predict microbial growth
- Emerging risks
- Microplastics



Predicting the Troublemakers: Guidance and a Computer Tool for Microbial Growth

IAFP Webinar: May 15, 2025, 10:30-11:30 AM CST

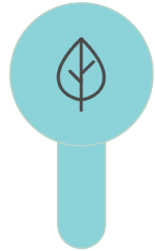
Moderated by Dr. Abdullatif Tay, PepsiCo

Agroscope Outlook: Next Steps in CoP Development and Engagement



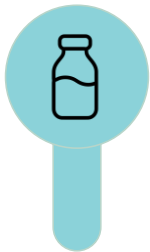
World Cheese Awards

Bern, November 2025 • 5,000+ cheeses from 50+ countries



Alternative Proteins Event

Bern, November 2025 • Focus on SMEs and start-ups

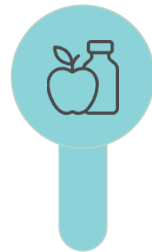


Milk Day

Bern, November 2025 • Focus on recent research in dairy

7 June

Food safety:
science in action



WFSD & BSL3 visit

8-10 Jun 2026 • Industries, SMEs, Experts and biosafety Net works



Bridging Science & Practice: Comprehensive Database on food safety and innovations

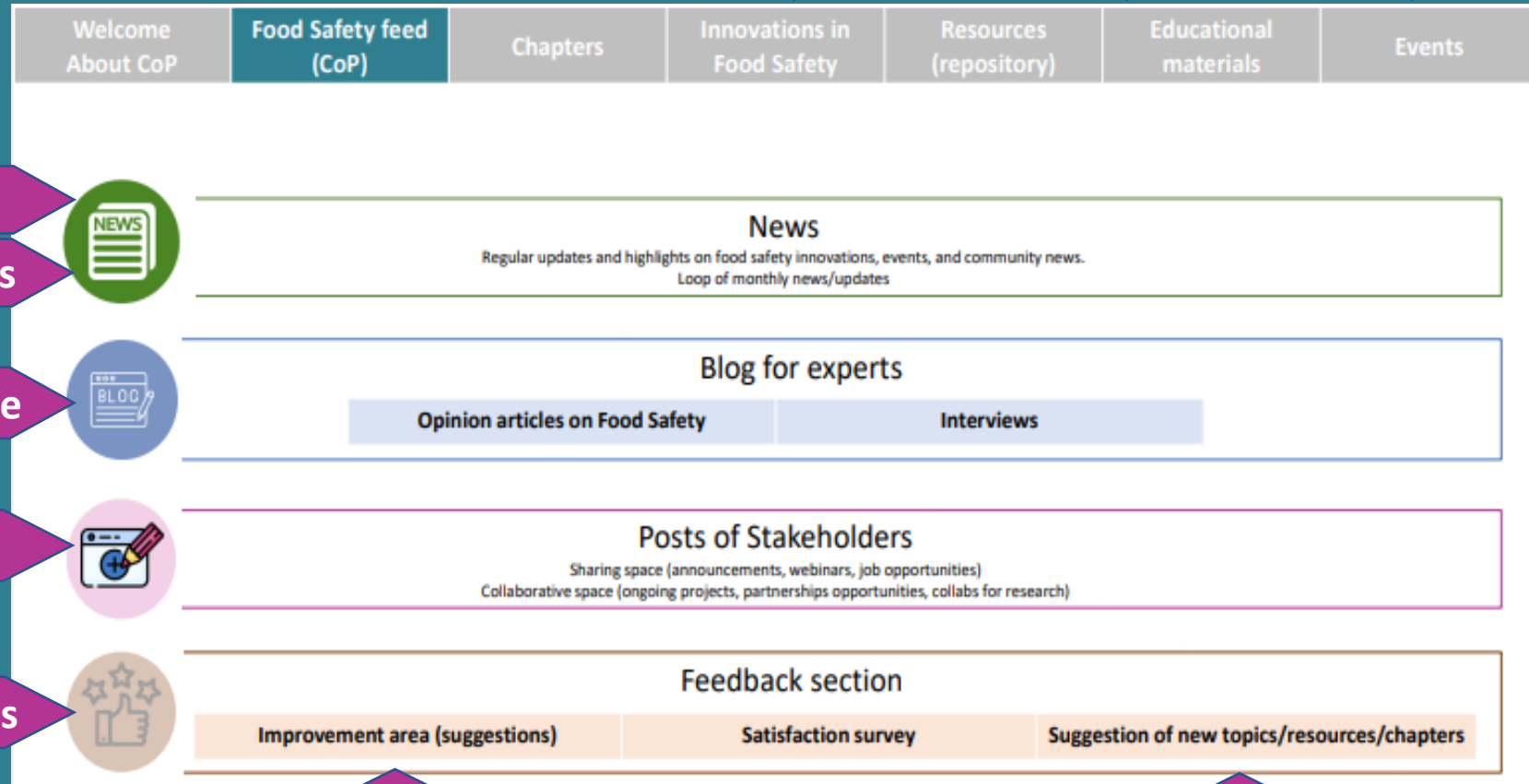
Agroscope, cheese, Dairy & alternatives

Matchmaking Innovative Startups

Practice-Oriented Training & videos

Webinars, On-site events

[Projeto de Vídeo - licence.mp4](#)



Newsletter; articles, events, AI & tech

Sharing Emerging Risks & Detection Methods

Interactive Blog & Q&A, knowledge exchange

Success Stories , Best Practice of members

Influence on Research Priorities & legislations

Members express needs

partnerships global research & innovation projects



CATALYSE

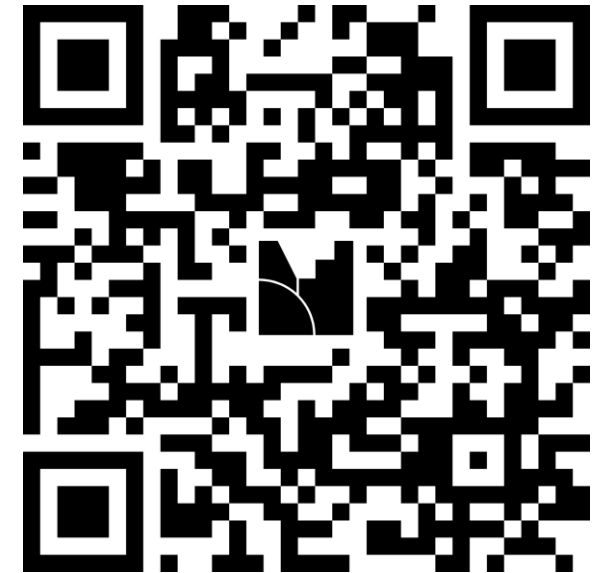
Catalysing scientific innovation into food safety action



JOIN THE
CATALYSE
COMMUNITY
OF PRACTICE!



<https://www.menti.com/al79zwjhm2y3>



<https://www.menti.com/alrne4u9tet9>

