

## Sustainable food production by fermentation

### Proposal for a pragmatic Regulatory approach for the use of food cultures

For the past 20 years, there have been discussions at EU level concerning the classification and regulation of certain uses of food cultures, specifically **food cultures with bioprotective effect**. Fermented foods result from the interaction of food cultures with raw materials, such as turning milk into yogurt. In some cases, fermentation is less visible but still occurring, and enhances food quality and safety.

While food cultures used in fermentation are recognised as ingredients under the General Food Law (EC No 178/2002), some Member States argue that certain applications — such as extending shelf life — should classify them as food additives under the Food Additives Regulation (EC No 1333/2008). Others have maintained status-quo.

#### EFFCA's Proposal

The food culture industry, represented by EFFCA, seeks a regulatory framework ensuring legal clarity, proportionality, consumer transparency, and safety — especially for applications that do not visibly alter the product, such as in fish, meat, salads, and ready-to-eat foods. This would also unlock fermentation's potential to support the transition to more sustainable food systems, reducing food waste and environmental impact.

#### Key Recommendations:

1. **Labelling solution:** Introduce a labeling term such as “**protected by fermentation**” and require listing “food culture” as an ingredient. Germany and France already use similar labels (“Schutzkulturen” and “ferments”, respectively).
2. **Regulatory Pathway:** Implement the label via an amendment to Regulation (EU) No 1169/2011 (Annex III or VI) through a delegated act or a Commission position statement.
3. **Maintain classification as food ingredients:** Maintain regulation under the General Food Law without requiring pre-market approval, which would create unnecessary administrative burdens, hinder innovation, and contradict Green Deal goals —especially since these cultures occur naturally and have been used for millennia.

4. **Industry Guidelines:** EFFCA developed a self-regulatory guideline for documenting food cultures' quality and safety.

This proposal is in line with the main principle in the General Food Law Regulation (178/2002) that the responsibility for ensuring food safety lies with the Food Business Operator, unless it cannot be duly managed at that level.

## **The role of fermentation**

Fermentation is a **natural biological process in all non-sterile foods** due to naturally present microorganisms. Humans have harnessed this process for centuries to enhance shelf life and food safety. Unlike additives, food cultures consist of live bacteria, yeasts, and filamentous fungi that interact dynamically with food, competing for substrates to ensure stable and predictable safety and quality.

The food culture industry collects, studies, and selects naturally occurring microorganisms, assessing their safety before cultivating them for food applications. This targeted use of optimized cultures, including those with bioprotective effects, replaces random microbial activity, enabling manufacturers to achieve **consistent food safety** and **naturally extend shelf life**.

## **Conclusion**

A clear, proportionate approach to bioprotective food cultures ensures legal certainty, transparency, and innovation while upholding food safety. EFFCA's labelling proposal and guidelines provide a pragmatic solution that informs consumers and supports EU sustainability goals.