

More sustainable, resilient, and competitive food systems through the development of intermediate food value chains



PRACTICE ABSTRACT No: 33

Peracetic acid vapor disinfection for packaging in the food Industry

In the Belgian Case Study, a sampling campaign among small to large-scale (semi) liquid food producers, revealed alarming levels of microbial contamination in pre-stacked recyclable packaging materials. The detected microbial presence, peaking at up to 2 log CFU/100 cm² in mesophilic bacteria, highlighted the necessity for implementing sterilization methodologies. In response to this concern, a promising solution emerged: the application of peracetic acid (PAA) vapor for disinfection purposes. This approach, meticulously tested using a prototype disinfection unit developed by Scaldopack, not only ensures the quality and integrity of food products but also addresses environmental concerns by minimizing water usage and chemical residues.

For farmers and small-scale producers, embracing this cutting-edge technology offers a practical and cost-effective solution to enhance productivity and ensure product quality. By adopting advanced sterilization methods, they can mitigate the risks of economic losses associated with spoilage, comply with stringent food safety standards, and meet consumer demand for high-quality products. Ultimately, this enables them to maintain market competitiveness within the dynamic landscape of the food industry while promoting sustainable practices.

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End Users

Farmer & Cooperative

Country

Worldwide



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ABOUT FAIRCHAIN

The FAIRCHAIN project launched in 2020 and coordinated by INRAE, is developing intermediate food value chains in the fruits and vegetable and dairy sectors. Through technological, organizational and social innovations and by developing business models FAIRCHAIN will enable small and mid-size stakeholders to scale up to supply fresh, sustainable and high-quality food products to consumers at a regional level.

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