

A food industry, urgent problem

One third of all the food we produce is wasted along the value chain. It's a triple-spectrum problem: it causes over \$1 trillion in annual economic losses, contributes up to 10% of global greenhouse-gas emissions, and persists while 64% of consumers demand cleaner-label products. A major share of this waste comes from microbial contamination, yet the industry still relies on the same chemical and physical strategies: biostatic methods that only slow down contamination but they don't prevent it. Over time, dominant spoilage fungi have adapted to survive them, developing resistance mechanisms that neutralize conventional preservatives through adaptive metabolism and spore resilience. The chemistry of preservation has barely changed in decades, while microbes keep evolving, leaving outdated molecules to face organisms shaped by millions of years of survival.

Volatile fungicides

At BioBlends, we are developing a new generation of food preservatives based on volatile blends naturally produced by bacteria. These formulations have been tested under real production conditions and across **multiple food matrices**, including bread (Fig. 1), baked goods, alternative cheese, and tomato sauce (Fig. 2), consistently achieving significant **shelf-life extension**. Our technology is not only highly effective but also integrates seamlessly into existing manufacturing practices, offering broad-spectrum, cost-competitive, and trace-free biopreservatives.



Figure 1. Comparison between untreated control and bread treated with BioBlends formulation under real storage conditions.

Commercial approach

4 pilot trials, 4 lab studies aligned with partner testing protocols, and 20 ongoing conversations with medium and large-scale companies.

Funding

Secured pre-seed funding and seeking seed funding for expansion and development.

Regulation

Regulatory feasibility assessment completed for key components in major markets (US/EU).

From industry to lab

Our business model combines two complementary and sequential routes. We operate through production and distribution with specialized manufacturing partners, supplying regional bakeries and validating performance under real production conditions. This enables early sales, technical validation, and rapid adoption without requiring changes to existing workflows, delivering strong benefits with minimal operational effort from customers.

Once validated compounds are ready to scale, we expand through partnership and licensing agreements with ingredient manufacturers and large food companies, accelerating market reach and enabling scalable deployment across multiple food categories.

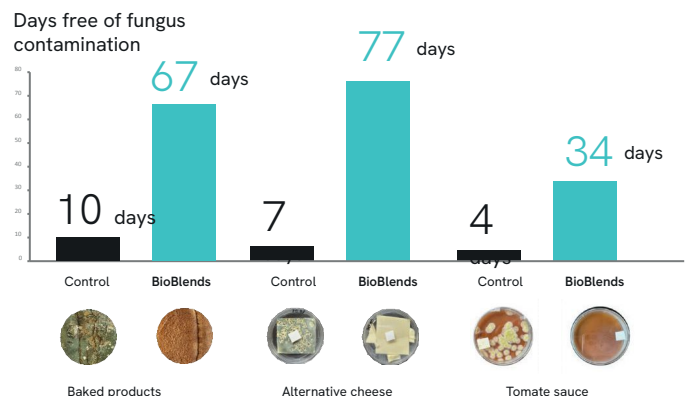


Figure 2. Comparison between untreated control and multiple food products treated with BioBlends formulation.

A new generation of
gas-based
bio-preservatives

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