Livaux®

Anagenix.

Livaux® + LGG Postbiotic Gummy: A Next-Generation Functional Food

The Livaux® + *Lactobacillus rhamnosus* GG (LGG) postbiotic gummy represents a pioneering advance in functional foods, combining a clinically validated prebiotic with a world-leading probiotic to deliver postbiotic benefits in a stable, convenient, and palatable format.

Key Innovations

- **First to Deliver LGG Postbiotics:** This is the world's first patented formulation combining Livaux® (gold kiwifruit powder) and LGG to generate postbiotics directly within the gummy matrix (Pre + Pro = Post).
- **Patented Prebiotic + Probiotic Synergy:** Controlled heating of the gummy blend inactivates LGG, creating a heat-killed postbiotic that delivers immune and gut barrier benefits, while Livaux® supports the microbiome and acts as a natural stabiliser.
- **Shelf-Stable & Safe:** Unlike live probiotics, the postbiotic gummy does not require refrigeration and is suitable for all ages, including immunocompromised individuals.

Scientific Rationale

What Are Postbiotics?

Postbiotics are non-living microbial cells or their components that confer health benefits. Heat-killed or inactivated LGG cells retain bioactive structures (e.g., cell wall fragments, metabolites) that modulate the immune system and support gut health.

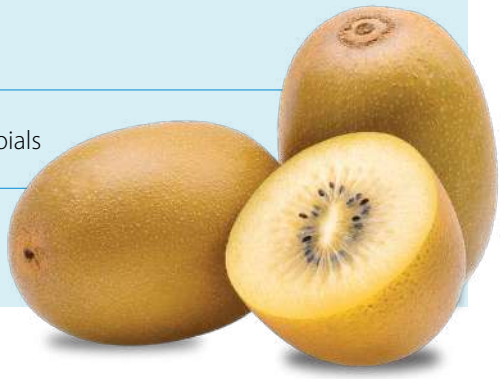
Livaux®: The Prebiotic Foundation

- **Clinically Proven:** 600 mg/day of Livaux® increases *Faecalibacterium prausnitzii*, improves bowel regularity, and reduces bloating[1,2].
- **Prebiotic Power:** Provides fibre, polyphenols, and vitamins that selectively feed beneficial gut bacteria, enhancing butyrate production and gut barrier integrity[3,4].
- **Natural Stabiliser:** Livaux® improves the stability of LGG during heating, ensuring more viable cells are converted to bioactive postbiotic compounds in the final product.

Benefit	Live LGG (Probiotic)	Heat-killed LGG (Postbiotic)
Gut barrier support	Enhances mucosal integrity	Delivers cell-wall fragments, modulating immune response
Immune modulation	Balances Th1/Th2, reduces inflammation	Reduces nitric oxide, supports anti-inflammatory pathways
Pathogen inhibition	Competes with pathogens, produces lactic acid	Retains bioactives cell wall components for immune defense
Safety & stability	Requires cold-chain	Shelf-stable, suitable for all ages

Benefits of the Combination Formulation

Benefit Area	Mechanism/Effect
Gut barrier integrity	Strengthens tight junctions, reduces leaky gut
Immune support	Modulates immune cells, enhances defence
Anti-inflammatory	Suppresses inflammation, promotes healing
Digestive health	Improves regularity, reduces bloating
Pathogen defence	Competes with harmful bacteria, produces antimicrobials
Nutrient absorption	Enhances uptake of vitamins and minerals



Livaux® Postbiotic Gummy: Formulation and Performance

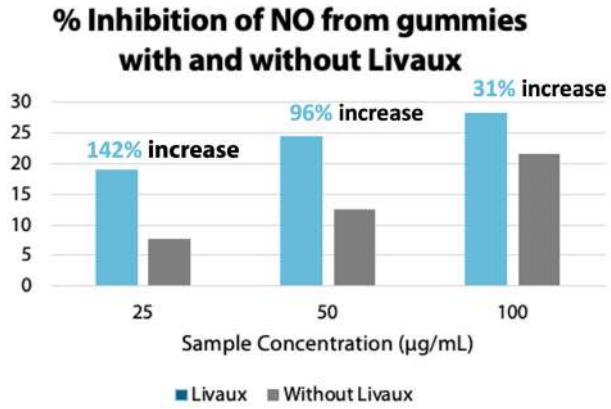
Formulation Process

- 300–600 mg Livaux® + LGG blended into a gummy matrix
- Controlled heating inactivates LGG, generating postbiotic bioactives in situ.
- Livaux® acts as a nutrient source and natural stabiliser, improving the survival and efficacy of LGG during processing.
- Contact us for specific formulation information and development support.

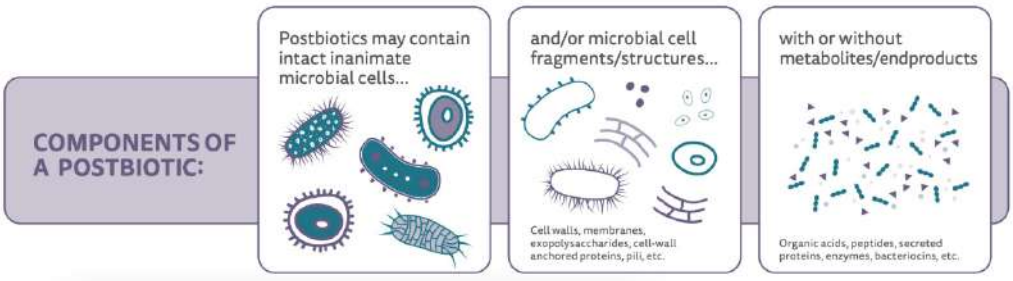
LOW TEMP

Functional Outcomes

- **Anti-inflammatory Activity:** In vitro, Livaux® postbiotic gummies inhibited nitric oxide production in immune cells, showing up to a 142% increase in anti-inflammatory benefits compared to gummies without Livaux®. The inclusion of Livaux in the postbiotic formulation contributed to greater potency and a more efficient modulation of cellular inflammatory responses indicating a synergistic effect.
- **Gut Microbiome Support:** Livaux® selectively increases *F. prausnitzi*i and other beneficial bacteria, supporting butyrate production and gut homeostasis[1,2].
- **Synergistic Effects:** The combination delivers both prebiotic-driven microbiome support and postbiotic immune modulation in a single, shelf-stable, easy-to-consume format.



(In vitro inflammation model where lipopolysaccharide (LPS) was used to induce nitric oxide production. Sample concentration equivalence to Livaux dosage; 25 µg/ml = 5 µg /mL, 50 µg /mL = 10 µg /mL, 100 µg /mL = 20 µg /mL)



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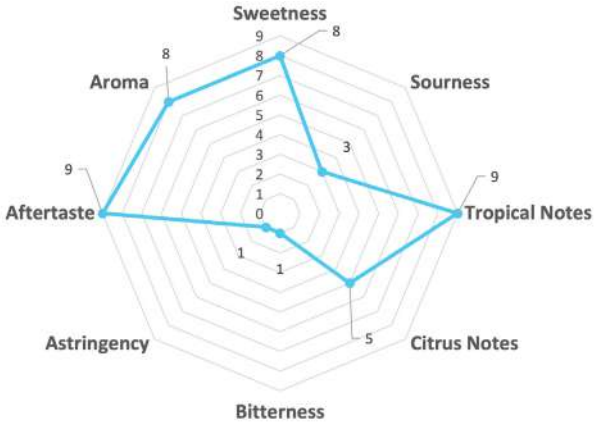
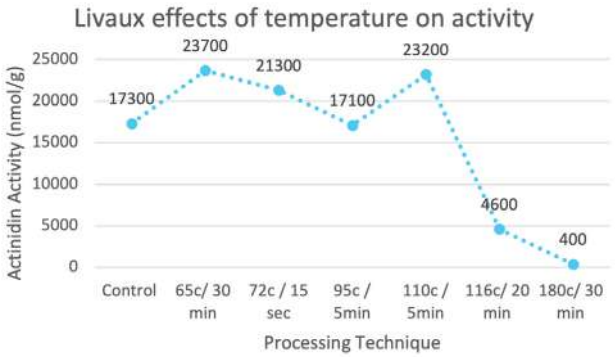
Livaux®: Taste and Stability

- **Taste Profile:** Mild, pleasant, sweet, and tropical, closely resembling fresh gold kiwifruit with notes of pineapple and mango. Neutral mouthfeel and minimal aroma impact ensure seamless incorporation into gummies and other food formats.





- **Temperature Stability:** Maintains over 80% bioactivity at processing temperatures up to 110°C, suitable for hot-fill and shelf-stable applications.

- **pH Stability:** Stable from pH 2.0 to 7.0, allowing use in both acidic and neutral food matrices.

Data-Driven Insights: Why This Matters

- **Safety:** Postbiotics eliminate the risk of live bacteria translocation or infection, a critical advantage for vulnerable populations.

- **Stability:** No cold-chain required, making the product more accessible and cost-effective.

- **Efficacy:** The dual action of Livaux® and LGG postbiotics supports gut barrier integrity, immune modulation, and anti-inflammatory activity, with proven benefits for digestive comfort and microbiome enhancement[1,2,3,4].

The Livaux® + LGG postbiotic gummy is a scientifically validated, consumer-friendly functional food innovation. It uniquely combines the microbiome-enhancing power of Livaux® with the immune and gut barrier benefits of LGG postbiotics, all in a stable, palatable, and safe format—setting a new standard for gut health solutions.

References:

1. Starin McKeen, Susanne M. Henning, Erin Lewis, Malkanthi Evans, Emma Graham, Neville Jopson, Jennifer Gu, Doug Rosendale, Livaux® gold kiwifruit powder consumption at 600 mg per day for 28 days increases Faecalibacterium prausnitzii numbers and decreases bloating and hydrogenotrophic species numbers in healthy individuals, consistent with slow fermentation: A randomized controlled trial, Bioactive Carbohydrates and Dietary Fibre, Volume 33, 2025, 100468, ISSN 2212-6198, https://doi.org/10.1016/j.bcdf.2025.100468.
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3. Cindy Duysburgh, Pieter Van den Abbeele, Kiran Krishnan, Thomas F. Bayne, Massimo Marzorati, A synbiotic concept containing spore-forming Bacillus strains and a prebiotic fiber blend consistently enhanced metabolic activity by modulation of the gut microbiome in vitro, International Journal of Pharmaceutics: X, Volume 1, 2019, 100021, ISSN 2590-1567, https://doi.org/10.1016/j.ijpx.2019.100021.
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MADE IN NEW ZEALAND · NON GMO · FODMAP FRIENDLY · GLUTEN FREE · NO PRESERVATIVES ADDED SUGARS · KOSHER · HALAL · ORGANIC

For more information,
please contact **info@anagenix.com**

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