

Exercise Recovery Solutions

***L. gasseri* CP2305 Postbiotic**

Supporting Recovery After Exercise

Globally, recovery after exercise is increasingly viewed as a multidimensional process that extends beyond rest. Intense training places stress on the body's recovery systems, including those that regulate fatigue and resilience. Emerging research highlights the role of the gut-brain axis in supporting both physical and mental recovery, suggesting that targeted nutrition—especially strategies that promote gut microbiota diversity—can help athletes adapt more effectively after exercise.[1]

This more holistic approach reflects a growing understanding that effective recovery supports not only physical performance but also mental balance and long-term health.[2] For this reason, consumers are prioritizing hydration, replenishing electrolytes and restoring energy alongside lifestyle habits that integrate exercise, sleep and nutrition.[3]

Nearly 33% of consumers have purchased sports and functional nutrition products in the past year.[3]

28% of consumers have used pre-workout or post-workout supplements in the past 12 months to support muscle recovery or growth.[4]

SCIENCE-BACKED RECOVERY AFTER EXERCISE

Clinical studies show that 20mg of *L. gasseri* CP2305 Postbiotic daily may support:[1]

- **Reduced levels of stress and occasional fatigue associated with exercise**
- **Improved recovery from exercise in male athletes**
- **Improved stress levels in male athletes**
- **Mitochondrial function**

A Cutting-Edge Postbiotic

L. gasseri CP2305 is a premier postbiotic from ADM's line of microbiome solutions. Backed by eight human clinical trials, *L. gasseri* CP2305 Postbiotic provides a holistic approach to health by addressing both physical and emotional dimensions of well-being—offering targeted support for recovery after exercise with benefits spanning stress, fatigue and the body's ability to produce energy.

The Science Behind *L. gasseri* CP2305 Postbiotic

With *L. gasseri* CP2305 Postbiotic, ADM brings to the market a cutting-edge ingredient that offers unmatched formulation stability for dietary supplements, functional foods and powdered beverages. This strain leverages the potential of the gut-brain axis by modulating the gut microbiome, positioning it as one of the most versatile and well-documented ingredients for mental and emotional wellness.

COMPOSITION
Lactobacillus gasseri
CP2305 Postbiotic

CONCENTRATION
500B CFU equiv./g
100B CFU equiv./g

DAILY DOSE
20mg powder per day

CLINICAL STUDIES
8

CERTIFICATIONS
Non-GMO
Gluten free
Halal certified

APPLICATIONS
Dietary Supplements
Functional Foods
Powdered Beverages

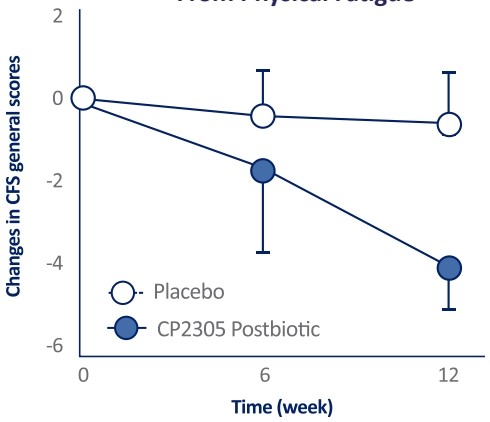
RECOVER & RESTORE

In a 12-week study of 49 healthy male runners (ages 18–22), *L. gasseri* CP2305 Postbiotic significantly facilitated recovery from physical fatigue while improving anxiety.[1]

- Improved recovery from physical fatigue (CFS, p=0.047)**
- Improved anxiety (STAI-State p=0.037; STAI-Trait p=0.002; HADS-A p=0.019)***
- Improved low mood scores (HADS-D p<0.001)***
- Significantly reduced the salivary stress marker, chromogranin A (p<0.001)
- Maintains hemoglobin levels in comparison to placebo training-induced reductions (p=0.004)
- Increased exercise-induced serum growth hormone (GH) levels (p=0.047)****
- Reduced the stress-induced changes in the expression of genes related to mitochondrial functions

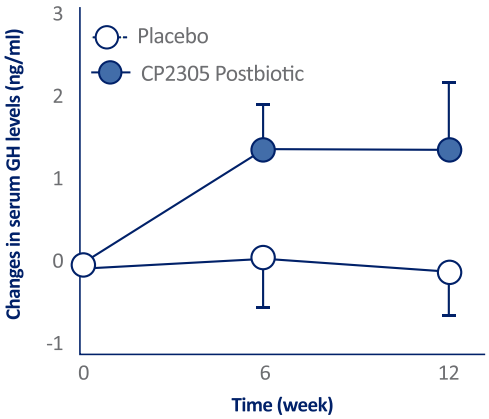
Sawada et al., 2019 Journal of Functional Foods 57:465–476
*2-arm, randomized, double-blind, placebo-controlled trial heat-treated *L. gasseri* CP2305 Postbiotic 20mg/day in 200mL sports drink
** Chalder Fatigue Scale (CFS) is a validated self-report questionnaire used to assess fatigue severity. Lower scores reflect lower perceived physical fatigue.
***Hospital Anxiety & Depression Scale (HADS)
****Growth Hormone (GH) is a key physiological regulator involved in exercise recovery and its circulating levels are sensitive to physical and psychological stress.

Significantly Facilitated Recovery From Physical Fatigue



L. gasseri CP2305 Postbiotic intake significantly facilitated recovery from physical fatigue vs. placebo (p=0.028).

Significantly Increased Serum Growth Hormone Levels



L. gasseri CP2305 Postbiotic intake signficantly increased serum growth hormone (GH) levels vs. placebo (p=0.047).

From Lab to Life: ADM Microbiome Solutions

ADM drives innovation. From the science behind the ingredients to real-world applications in food, beverage and dietary supplements, ADM delivers future-forward nutrition fueled by science, with a complete range of solutions from pre-, pro- and postbiotics to bacteriophages and enzymes, all clinically documented to deliver health & wellness benefits.

SOURCES

[1] Sawada et al. (2019) Journal of Functional Foods 465-476
[2] Mintel, Ingestible Beauty – US – 2024
[3] Innova Market Insights, RTD Sports and Fitness Drink Trends: Global Market Overview, December 2025
[4] Mintel, Sports and Performance Drinks – US – 2025

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