

***Lactiplantibacillus plantarum* KABP®-051 probiotic strain shows weight management and mood benefits through the gut-brain axis – new clinical study from Kaneka Probiotics and AB-Biotics.**

Barcelona, Spain (9 June, 2026) – New clinical [research](#) has revealed that Kaneka Probiotics' and AB-Biotics' probiotic strain *Lactiplantibacillus plantarum* KABP®-051 delivers improvements in body composition alongside benefits for mood and energy levels in healthy overweight adults.¹ Published in the Journal of Medicinal Food, the findings demonstrate that the potential of 'psychobiotics', which influence mood and mental wellbeing through the gut-brain axis, may extend further to include drug-free support for weight management and healthy lifestyles.

L. plantarum KABP®-051 shares a genetic profile with AB-BIOTICS and Kaneka Probiotics' Mindbiome® strain², which has previously been shown to significantly reduce stress and anxiety by modulating neuroactive compounds including serotonin.^{3,4} To investigate *L. plantarum* KABP®-051's potential across both metabolic and mood outcomes, researchers conducted a randomized, double-blind, placebo-controlled trial, in which 60 healthy overweight adults (BMI 25–35) with moderate stress levels received either *L. plantarum* KABP®-051 (1 billion CFU/day) or placebo. Participants also attended weekly lifestyle education sessions but were not placed on any specific diet or exercise regimen.

After 12 weeks, the probiotic group showed greater improvements in body composition measurements compared to placebo, including an average of almost 2 kg (2.4%) greater decrease in body weight.¹ Researchers noted that, while modest, body weight reductions of this size are associated with meaningful health benefits, including improvements in cardiovascular risk factors and glycemic control.^{5,6} Participants receiving *L. plantarum* KABP®-051 also showed a 2.15 cm reduction in waist circumference and a significant decrease in body fat percentage compared to the placebo group (-0.91% vs +0.35% respectively).¹

As a secondary endpoint, participants' mood was also measured using the validated Profile of Mood States (POMS) questionnaire, revealing greater reductions in fatigue and confusion in the probiotic group after 12 weeks compared to placebo.¹ Furthermore, microbiome analysis showed a significant increase in the abundance of Lactobacillus species in participants receiving the probiotic, consistent with positive modulation of gut microbiota composition.¹

“Body weight and mental wellbeing are deeply interconnected, and both are strongly influenced by the gut microbiome,” comments Miquel Angel Bonachera, Executive Director and Co-Founder, AB-BIOTICS. “This research demonstrates how these connections can be harnessed to deliver meaningful improvements in both body composition and mood with a single intervention like *L. plantarum* KABP®-051. For many consumers, weight management is as much about feeling more energized and mentally well as it is about the physical outcomes. These effects are also linked, and by improving mood and energy levels through the gut-brain axis, *L. plantarum* KABP® -051 may have enabled better self-regulation, supporting long-term adherence to healthier habits. These are exciting results that point toward next generation probiotic solutions with the potential to transform how we support consumers on their weight management and healthy lifestyle journeys.”

The researchers posited possible mechanisms of action for the improvements in body composition seen with *L. plantarum* KABP®-051 supplementation. Unpublished in vitro research suggests that *L. plantarum* KABP®-051 may stimulate production of glucagon-like peptide-1 (GLP-1).¹ This hormone is involved in appetite regulation and glucose metabolism, offering a plausible mechanistic link to the observed effects on body composition. Together with the observed mood and energy benefits, these findings position *L. plantarum* KABP®-051 as a non-drug, microbiome-based approach to support healthy lifestyles through the gut-brain axis.

To learn more about *L. plantarum* KABP®-051, read the full study [here](#).

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About Kaneka Probiotics

The Kaneka Probiotics portfolio includes formulations for Gut-Brain Axis, Stress/Mood/Anxiety, Immunity, Upper Respiratory Tract, Digestion, GI Health, Oral-Cum Health, Baby Colic, Women’s Health and Cardiovascular Health. Kaneka Probiotics is committed to quality, innovation & science and have 20+ studies that are ongoing for areas in Sports Nutrition, Gut Health [or Permeability], Nutrition Absorption, Halitosis, and many other disciplines.

Editor’s note: AB-BIOTICS is an affiliate company of Kaneka that manufactures and distributes probiotic solutions globally. Products are available in the North American and Japanese markets under the Kaneka Probiotics brand.

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Talbott, S., Stephens, B., Talbott, J., Oddou, M., & Fumiki, A. (2026). Effects of Lactiplantibacillus plantarum KABP051 Probiotic on Body Composition, Microbiome and Mood in Healthy Overweight Adults. *Journal of Medicinal Food*, 1096620X261448041.

Rizzi, F., et al. (2024). Abstract 1339 Genetic and Phenotypic Equivalence Between Two Strains of *L. plantarum* Isolated in Separate Parts of the Planet Supports the Nomadism of Some Lactic Acid Bacteria. *Journal of Biological Chemistry*, 300(3).

Liu, C., et al. (2020). Lactobacillus plantarum DR7 modulated bowel movement and gut microbiota associated with dopamine and serotonin pathways in stressed adults. *International Journal of Molecular Sciences*, 21(13), 4608.

Chong, H. X., et al. (2019). Lactobacillus plantarum DR7 alleviates stress and anxiety in adults: a randomised, double-blind, placebo-controlled study. *Beneficial microbes*, 10(4), 355-374.

Horn, D. B., et al. (2022). What is clinically relevant weight loss for your patients and how can it be achieved? A narrative review. *Postgraduate Medicine*, 134(4), 359-375.

Wing, R. R., Lang, et al. (2011). Benefits of modest weight loss in improving cardiovascular risk factors in overweight and obese individuals with type 2 diabetes. *Diabetes care*, 34(7), 1481-1486.

Schachter, J., et al. (2018). Effects of obesity on depression: a role for inflammation and the gut microbiota. *Brain, behavior, and immunity*, 69, 1-8.