Probiotics for Weight Management

THE HEAVY IMPACT OF BEING OVERWEIGHT

Obesity and being overweight have become global issues that affect almost 2 billion people worldwide, with obesity rates almost tripling in the last forty years.[1]

Excess weight and obesity can negatively impact each of the interconnected clinical measures that characterize metabolic syndrome:

- Increased waist circumference
- Reduced HDL cholesterol
- Elevated fasting triglycerides
- Elevated resting blood pressure
- Elevated fasting glucose

Metabolic syndrome is indicated when any three of these measures are present, and observational data have shown this condition is associated with an increased risk of heart disease and type 2 diabetes.[2]

In a 6-year observational study, participants showing the highest increases in fat volume over the course of the study period were at increased risk of elevated triglycerides and hypertension.[3] Those with the highest increases in abdominal fat showed an increased incidence of high blood pressure, high cholesterol, and high triglycerides as well as meeting criteria for metabolic syndrome.

Lifestyle factors like diet and physical activity are important to weight management, and reducing abdominal obesity is a primary target to reduce health risks associated with metabolic syndrome.[2]

Nearly **30%** of the world's population is obese or overweight[1]

Globally over **1.9 billion** adults are overweight[1]

Almost **400 M** children and adolescents are overweight or obese[1]

biopolis@adm.com | healthandwellness@adm.com
adm.com/yourwellness | biopolis.es

The Potential of the Microbiome

Recent innovations in analytical techniques have allowed researchers to begin to understand the role of the gut microbiome in metabolic health and obesity.[4]

Alterations to the composition and diversity of the microorganisms that make up the gut microbiome have been linked to a number of conditions and diagnoses—including obesity.[5] Specifically, reductions in certain species or overall reductions in microbial diversity have been associated with increased rates of obesity, as well as type 2 diabetes and dyslipidemia.[6]

ADM has conducted extensive pre-clinical and clinical research demonstrating the role of the microbiome in multiple areas of health and wellness, including obesity and metabolic health.

ADM'S INNOVATIVE MICROBIOME RESEARCH

ADM has more than 15 years of experience and a high level of expertise in conducting game-changing proprietary microbiome research.

biopolis@adm.com | healthandwellness@adm.com
adm.com/yourwellness | biopolis.es

BPL1: A Cutting-Edge Biotic Solution

BPL1 (*Bifidobacterium animalis subsp. lactis* CECT 8145) is ADM's proprietary, award-winning probiotic strain with clinically-documented results in improving body mass index (BMI), waist circumference (WC),** and central adiposity.**

WINNER NUTRA INGREDIENTS AWARDS 2020

WINNER: **NutraIngredients Awards in 2020 as Ingredient of the Year in Weight Management**

THE SCIENCE BEHIND BPL1

BPL1 is supported by robust pre-clinical and clinical evidence illustrating its benefits.

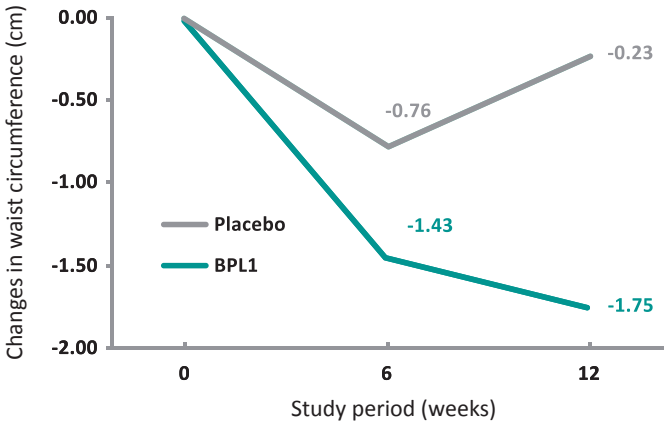
A randomized double-blind, placebo-controlled clinical trial was conducted to better understand BPL1's role in the management of weight.[7]

- Studied women and men with waist circumferences greater than or equal to 88cm and 102cm, respectively
- Intervention: BPL1 10^{10} colony forming units (CFU) once daily for 12 weeks
- Multiple outcomes assessed, including anthropometric biomarkers and microbiome analysis

** Compared to baseline

64% of patients taking BPL1 saw a decrease in waist circumference after ONLY 12 weeks.

57% of those taking BPL1 who **had a decrease in waist circumference** saw a reduction higher than 3cm.*



* Data not published

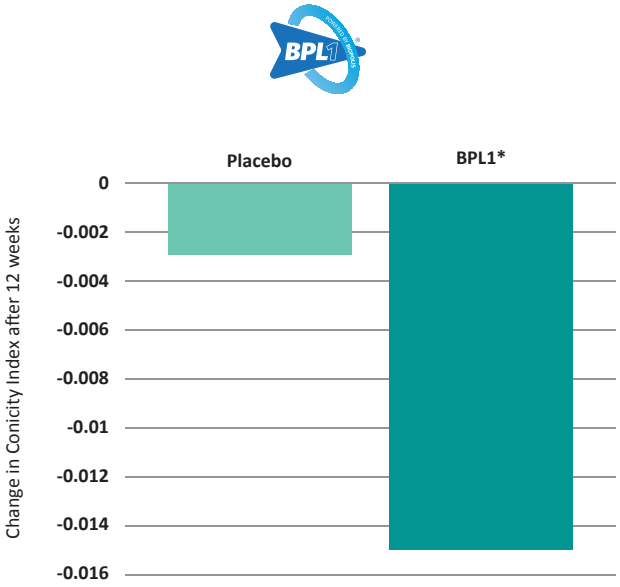
ADM

biopolis@adm.com | healthandwellness@adm.com
adm.com/yourwellness | biopolis.es

BPL1 Probiotic

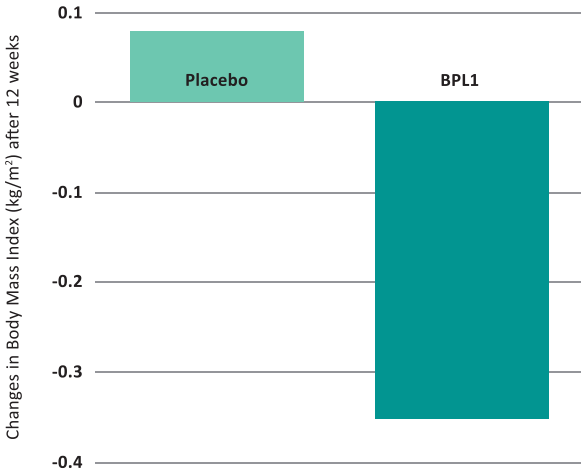
Powered by BIOPOLIS SCIENCE

Participants taking BPL1 saw a **significant decrease in central adiposity** (as measured by the Conicity Index) after 12 weeks, compared to baseline.[7]



*p<0.05 compared to baseline

Participants taking BPL1 showed a statistically **significant reduction in body mass index (BMI)** compared to placebo at 12 weeks of the intervention period.



The presence of associated species of *Akkermansia* is related to improved metabolic health and healthier body weight.[8]

Analysis showed that individuals receiving BPL1 increased the proportion of *Akkermansia* species during the trial.

biopolis@adm.com | healthandwellness@adm.com
adm.com/yourwellness | biopolis.es

BPL1 at a Glance

BPL1 has been clinically shown to support weight management, reduce waist circumference, decrease visceral fat area, and reduce BMI.

More than 9 years of research and development, including proprietary, patent-protected science (over 50 microbiome-related publications, including 9 dedicated to BPL1) and human clinical trials

Cutting-edge pre-clinical and clinical research, product development and commercialization capabilities

Human origin strain protected by patent

Concentration:

Probiotic BPL1: 100B cfu/g, 300B cfu/g

More Applications, More Benefits

BPL1 is ideal for use in **dietary supplements** including oil drops, capsules, sachets and sticks, and **dairy products**, such as fresh milk and fermented milk.

BPL1 can also be incorporated into the following applications, under certain manufacturing and preservation conditions:

CLAIMS AND CERTIFICATIONS

- EU Permitted | QPS List
- GRAS
- Non-GMO
- Organic Compliant
- Gluten Free
- Kosher

biopolis@adm.com | healthandwellness@adm.com
adm.com/yourwellness | biopolis.es

BPL1 Probiotic

Powered by BIOPOLIS SCIENCE

ADM DELIVERS FOR YOU

An innovative leader in the microbiome field, ADM delivers future-forward nutrition fueled by science, with a complete range of solutions from prebiotics, to probiotic and postbiotic strains, all clinically documented to deliver health & wellness benefits.

An expansive pantry of health & wellness ingredients including biotics, botanical extracts, vitamins, minerals and more means you can deliver innovative, science-driven supplements and food and beverage formulations to meet consumers' evolving functional nutrition needs. With our vertically integrated supply chain to ensure the reliability and availability of high-quality products and our dependable customer service, you get industry-leading quality solutions to ensure your success.

SOURCES

[1]The World Health Organization, (2020) *Fact Sheet on Obesity.* https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight

[2]Grundy, SM; et al. (2005) *Circulation.* 112: e285-e290

[3]Lee, JJ; et al. (2016) *J Am Coll Cardiol.* 68: 1509-1521

[4]Davis, C.D.; (2016) *Nutr Today.* 51(4): 167–174

[5]Guinane, C.M. and Cotter, P.D. (2013) *Therap Adv Gastroenterol.* 6(4): 295–308

[6]Duranti, S.; et al (2017) *Genes Nutr.* 12: 18

[7]Pedret, A; et al. (2019) *Int J Obes (Lond).* 43: 1863-1868

[8]Everard, A.; et al. (2013) *Proc Natl Acad Sci U.S.A.* 110(22): p. 9066-71

biopolis@adm.com | healthandwellness@adm.com
adm.com/yourwellness | biopolis.es

Unlocking Nature. Enriching Life.