



PRESS RELEASE - LATEST NEWS TO MEDIA

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New clinical results on stress from Probi and their probiotic strain *L. plantarum*, HEAL9™

Randomized, double blind, placebo-controlled clinical study published. The trial showed significant reduction in the pro-inflammatory markers fractalkine and CD163.

Maintaining or improving mental health and function is of growing interest for many people, and the number of chronically stressed people is increasing dramatically. Mental health is an area which is addressed by the World Health Organization (WHO)*, as it has great impact on individuals as well as on our society in general.

Probiotics may play a role for psychological function, as the intestine and the brain are connected via the gut-brain axis. Furthermore, the intestinal microbiota influences the immune activation and signaling molecules that are involved in the stress response.

During acute stress the immune system is activated, leading to an imbalance between inflammatory and anti-inflammatory responses. In chronic stress this imbalance and resulting low-grade inflammation may lead to development of diversified stress-related diseases such as cardiovascular diseases, neurodegenerative diseases and cancer.

“The aim of the study was to investigate if intake of the probiotic strain *Lactiplantibacillus plantarum*, HEAL9™ could counteract elevated cortisol and inflammation levels in subjects with chronic stress that are exposed to an acute stress test”, explains Titti Niskanen, Director R&D & Clinical Operations.

“We are pleased with the clinical results showing that intake of *Lactiplantibacillus plantarum*, HEAL9™ resulted in significantly decreased plasma levels of the two inflammatory markers (soluble fractalkine and CD163) compared to placebo – these markers are coupled to acute stress in chronically stressed individuals”, Niskanen concludes. It is, to our knowledge, the first time it has been shown that acute mental stress triggers the immediate release of soluble fractalkine but also that a probiotic intervention can reduce the release and thereby potentially mitigate the negative physiological side effects of stress.

Tom Rönnlund, CEO at Probi emphasizes the clinical importance of probiotics and mental health: “We are very excited about the study results with HEAL9™”, and he continues: “Probi believes that probiotics can play a part in mental health and improve the well-being of many people. This exploratory study provides us with a good platform for further investigations within the gut-brain axis area”.

The clinical trial, published in *Physiology & Behavior*, can be found [here](#).



FOR FURTHER INFORMATION, CONTACT:

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ABOUT PROBI

Probi is a world leader within probiotics. Our vision is to help people live healthier lives by delivering effective and well-documented probiotics, with proven health benefits based on scientific research. Probi offers dedicated probiotic expertise and partnership all the way from R&D to finished products for companies within the consumer healthcare and food industry. Our GMP certified manufacturing facilities produce probiotics in custom made formats with value-adding delivery technologies. Founded by scientists in Sweden 1991, Probi is a multinational company with 4 centers of excellence, active in more than 40 markets around the world and holding over 400 patents worldwide. Read more at www.probi.com.

* Reference: https://www.who.int/mental_health/evidence/en/

Note: *Lactiplantibacillus plantarum* was formerly named *Lactobacillus plantarum*, prior to the taxonomic reclassification.