

## ***Bacillus subtilis CU1' effects on the immune system raised the interest of the scientific community***

**For immediate release – March 15<sup>th</sup> 2016** – Lesaffre Human Care, supplier of quality ingredients from yeast and bacteria fermentation for the global human care markets, is proud to report that *Bacillus subtilis* CU1' health benefits were recognized by the scientific community in a newly published peer-reviewed paper written by a team of researchers from the University of Bordeaux, Biofortis-Mérieux NutriSciences, Paris 7 University and Lesaffre Human Care.

*Bacillus subtilis* CU1 is made of an exclusive and patented strain of *Bacillus subtilis*, registered with the French National Collection of Microorganism Cultures as CNCM I-2745. It is a spore forming bacteria that helps support immune health, especially in people with weakened natural defenses.

Researchers recruited 100 healthy volunteers, aged between 60 and 74 years old and with a history of winter infections, to participate in a randomized, double-blind, placebo-controlled study. The purpose of this trial, conducted in collaboration with Pr. Philippe Marteau<sup>1</sup> – independent expert in the area of Gastroenterology –, was to investigate the effect of *Bacillus subtilis* CU1 on winter respiratory and gastrointestinal infectious episodes in elderly people.

The target group was purposely selected as natural defenses weaken as we age and, among other things, a decrease in secretory IgA (sIgA) concentrations can be observed. Gastrointestinal and respiratory sIgA are the first line of immune body defenses and a deficiency can lead to increased risks of infections. Seniors are therefore a relevant population to assess *Bacillus subtilis* CU1' efficacy in boosting the immune function.

This trial was performed in the winter within a period of over 4 months, alternating 10 days of consumption of *Bacillus subtilis* CU1 ( $2 \times 10^9$  spores of the bacteria/day) or the placebo, followed by 18-day without consumption. Findings of this clinical study were recently published in the renowned 'Immunity & Ageing' journal<sup>2</sup>.

In a sub-group of 44 participants, consumption of *Bacillus subtilis* CU1 was found to significantly decrease the frequency of upper respiratory infections versus consumption of the placebo (-45%). Further analysis of the data also showed a significant and durable increase in sIgA concentrations with consumption of *Bacillus subtilis* CU1 versus the placebo. *“Increased SIgA levels of 87 % and 45 % in feces and saliva respectively are most probably of physiological significance in ameliorating the health status of seniors receiving B. subtilis CU1”*, researchers concluded. It is worth noting that no side effects were reported during the study. *“These results provide evidence that consumption of B. subtilis CU1 may be a safe and effective prevention strategy to stimulate immune responses and provide long-term support to people at risk of sIgA deficiency such as: the elderly, people suffering from chronic stress/sleep deprivation, professional athletes, etc.”*, states Elodie Ruffin - Probiotics Marketing Manager at Lesaffre Human Care.

Thanks to its ability to form spores, *Bacillus subtilis* CU1 is different from many other bacteria which are often vulnerable to manufacturing processes or gastric acid and intestinal bile. *Bacillus subtilis* CU1 is indeed highly stable and able to survive exposure to the human gastrointestinal tract as well as extreme conditions. It can thus be incorporated into a diverse range of food and beverage applications (e.g.: baked cookies, hot tea, etc...) and deliver its health benefits no matter how harsh the environmental conditions may be.



In addition, *Bacillus subtilis* CU1 is compatible with all kinds of dietary restrictions. It is gluten and lactose free, non-GMO, as well as Halal and Kosher certified; and therefore suited for virtually any healthy individual that wants to boost their natural defenses<sup>3</sup>.

For more information on *Bacillus subtilis* CU1 and other ingredients offered by Lesaffre Human Care, visit: <http://www.lesaffrehumancare.com>.

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Lesaffre Human Care will be exhibiting throughout the world in 2016. Check out where and when on: <http://www.lesaffrehumancare.com/news-events/events.html>

Their next show is Vitafoods Europe, March 10<sup>th</sup> - 12<sup>th</sup> in Geneva (Switzerland). Catch up with them stand n°L12!

<sup>1</sup> Pr. Philippe Marteau - Gastroenterologist, Head of the medico-surgical department of hepato-gastroenterology at Lariboisière Hospital (Paris) and Professor of gastroenterology at Paris 7 University.

<sup>2</sup> Lefevre M, Racedo S, Ripert G, Housez B, Cazaubiel M, Maudet C, Jüsten P, Marteau P, Urdaci M. *Probiotic strain Bacillus subtilis CU1 stimulates immune system of elderly during common infectious disease period: a randomized, double-blind placebo-controlled study*. Immunity & Ageing (2015) 12:24; DOI 10.1186/s12979-015-0051-y

<sup>3</sup> As for all probiotics, the use of *Bacillus subtilis* CU1 in patients in fragile health conditions (such as high-risk immune-compromised patients, critically sick infants, pre-term infants...) is contraindicated.

## About Lesaffre Human Care

Lesaffre Human Care was created in 2007 as a business unit of Lesaffre with the mission to develop and supply ingredients from yeast and bacteria fermentations to the global human care markets. With the support of the company's unique know-how as well as more than 160 years of experience in biotechnology and yeast research and manufacturing, Lesaffre Human Care offers ingredients with scientifically proven efficacy to the nutritional supplements, pharmaceuticals and functional foods industry. From nutritional and fortified yeasts to yeasts fractions, probiotic yeasts and bacteria, or pure molecules from fermentation, Lesaffre Human Care has solutions for a wide range of applications such as digestive health, immunity enhancement, joints and liver health, mood management, vegetarian support, overall wellbeing and more.

For further information, visit <http://www.lesaffrehumancare.com>

## About Lesaffre

As a global key player in yeasts and fermentation, Lesaffre designs, manufactures and markets innovative solutions for Baking, Food taste & pleasure, Health Care and Biotechnology.

Family-owned group born in Northern France in 1853, now a multi-national and a multicultural company, Lesaffre commits to work with confidence to better nourish and protect the planet.

In close collaboration with its clients and partners, Lesaffre employs 9 300 people in more than 80 subsidiaries based in about forty countries. Lesaffre achieves a turnover of more than 1.8 billion euros including over 40% on emerging markets.

More information on <http://www.lesaffre.com>