DuPont & University of Virginia Study Demonstrates Probiotics Support Respiratory Immune Function

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MADISON, Wis. (PRWEB) May 17, 2017 -- DuPont Nutrition & Health (DuPont) announced today that a study published in Beneficial Microbes and sponsored by DuPont and the University of Virginia demonstrated the role of probiotic supplementation to maintain healthy respiratory immune function. The results of a randomized, double-blind, placebo controlled study investigating the effect probiotics had on the immune response in healthy, rhinovirus-challenged adult human subjects suggest that ingestion of BI-04™ at a dose of 2 billion cfu per day has an effect on the inflammatory response to rhinovirus infection(1). The common cold is one of the most prevalent diseases globally and is typically caused by rhinovirus infection.

A specific probiotic strain Bifidobacterium lactis BI-04™ (BI-04™), available only from DuPont, was consumed by participants for one month, and innate immune response and presence of rhinovirus in the nostrils was investigated. The virus and the immune markers were analyzed from nasal washes, collected before and after BI-04™ supplementation and for 5 days after the introduction of the rhinovirus challenge. Compared to placebo, the probiotic supplement, commercially available HOWARU® Protect Adult, had an effect on the presence of the virus in the nostrils, demonstrated by a decreased amount of rhinovirus in nasal washes during infection and a lower proportion of study participants with rhinovirus detected in nasal washes.

“The effects observed in this short-term, well-controlled study were modest and may only partially explain reduction in illness reported in the natural setting,” said Dr. Ron Turner, MD, professor of Pediatrics, University of Virginia School of Medicine. “However, the results do suggest the utility of further investigations of the effect of specific probiotics on innate immune function in the human host.”

This study approach, known as a challenge model, is unique in that it provides an opportunity to characterize the interaction between the infection and host responses under controlled conditions in human volunteers with use of probiotics. The results of the new study suggest that ingestion of BI-04™ may modify the innate immune system response following supplementation and the inflammatory response in the nose following rhinovirus infection.

Probiotics have induced expression of antiviral responses in preclinical cell and animal models. Moreover, BI-04™ has been shown to reduce the risk of upper respiratory illness episodes in a human clinical trial over a 5-month study time(2).

“DuPont has a strong portfolio of clinically documented probiotics for immune health including HOWARU® Protect EarlyLife for pregnant mothers and infants, HOWARU® Protect Kids, HOWARU® Protect Sport, HOWARU® Protect Senior, and, of course, HOWARU® Protect Adult. We are committed to continuing to clinically research probiotics for immune health, digestive health and emerging health areas,” said Megan DeStefano, global probiotics marketing leader, DuPont Nutrition & Health. “HOWARU® Protect Adult (BI-04™) is one of the best documented probiotics for immune health in the world, and we are proud to be able to deliver an efficacious and stable probiotic to the industry so consumers can benefit.”
DuPont is committed to continuing research to better understand the role of probiotic supplementation and microbiota in immune system function. BL-04™ is the first probiotic strain that has shown efficacy on modulating immune response in a well-controlled rhinovirus challenge model. We are excited to continue research collaboration with University of Virginia on investigating the efficacy of BL-04™ further.

DuPont Nutrition & Health combines in-depth knowledge of food and nutrition with current research and expert science to deliver unmatched value to the food, beverage and dietary supplement industries. We are innovative solvers, drawing on deep consumer insights and a broad product portfolio to help our customers turn challenges into high-value business opportunities. More information is available at www.food.dupont.com.

DuPont (NYSE: DD) has been bringing world-class science and engineering to the global marketplace in the form of innovative products, materials, and services since 1802. The company believes that by collaborating with customers, governments, NGOs, and thought leaders we can help find solutions to such global challenges as providing enough healthy food for people everywhere, decreasing dependence on fossil fuels, and protecting life and the environment. For additional information about DuPont and its commitment to inclusive innovation, please visit http://www.dupont.com.

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