

Press Release

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DSM Nutritional Products
Communications
www.dsm.com/human-nutrition

DSM highlights a new study demonstrating vitamin D linked to reducing the risk of lung cancer

A [new research paper](#) examines the role of vitamin D in reducing the risk of lung cancer, in particular, among patients with vitamin D deficiency. The meta-analysis of ten shortlisted studies revealed a significant 5% reduction in the risk of lung cancer associated with each 10 nmol/L increase of vitamin D intake. The paper has been published in the Journal of Cancer Causes & Control and is part of DSM's ongoing advocacy of the importance of vitamin D in maintaining adequate health and preventing conditions associated with its deficiency.

Vitamin D is synthesized in the skin under exposure to sunlight and is converted to the circulating form 25-hydroxyvitamin D (25[OH]D) in the liver. Observational studies have found that an increase in vitamin D is associated with lower incidence and mortality of various types of cancers, suggesting that 25(OH)D affects their development. However, so far, prospective observational studies examining the 25(OH)D and lung cancer association have reported inconsistent findings. DSM's meta-analysis concluded that there is a non-linear relationship between 25(OH)D and lung cancer. The greatest reduction in its risk proved to be at vitamin D status of nearly 53 nmol/L, which remained protective up to 90 nmol/L.

Prof. Li-qiang Qin and his research team at Soochow University, China, comment: *“This is a significant result, as lung cancer is one of the top five cancers diagnosed among men and women, as well as being among the most common causes of death in the world.¹ More research is needed to determine whether a further increase has positive effects in reducing the risk of cancer, however this outcome helps us raise awareness of vitamin D health benefits.”*

Dr. Weiguo Zhang, corresponding author from DSM Nutritional Products, China says: *“88% of the world's population has sub-optimal vitamin D levels (<75 nmol/L).² Given that vitamin D deficiency is prevalent worldwide, we are obligated to address this public health matter immediately. Studies like this help to understand how micronutrients affect the human body and how certain conditions can be prevented with increased and targeted intake.”*

Dr. Manfred Eggersdorfer, Senior Vice President, Nutrition, Science & Advocacy at DSM and Professor for Healthy Ageing at Groningen University comments: *“There is even stronger proven evidence that vitamin D is one of the micronutrients that are essential to human health. It not only helps maintain bone mineral density and muscle strength, but also helps to prevent the onset of non-communicable diseases as well as supporting the overall wellbeing. The new study adds to a larger body of evidence which demonstrates the emerging roles of vitamin D in protecting populations from developing other cancer risks, for instance, colon and breast cancer.”*

DSM is actively involved in various research projects that raise awareness and highlight the positive health benefits that vitamin D provides. It has partnered with the acclaimed scientist in biochemistry and molecular biology, Dr. Bruce Ames, to deliver a webinar on numerous health benefits of vitamin D. To

¹ <http://www.who.int/mediacentre/factsheets/fs297/en/>

² <http://www.iofbonehealth.org/facts-and-statistics/vitamin-d-studies-map>

Forward-looking statements

This press release may contain forward-looking statements with respect to DSM's future (financial) performance and position. Such statements are based on current expectations, estimates and projections of DSM and information currently available to the company. DSM cautions readers that such statements involve certain risks and uncertainties that are difficult to predict and therefore it should be understood that many factors can cause actual performance and position to differ materially from these statements. DSM has no obligation to update the statements contained in this press release, unless required by law. The English language version of the press release is leading.

access the upcoming webinar on 23rd September 2015, 10:00 CEST / 16:00 SGT / 17:00 JST and 9:00 PDT / 12:00 EDT / 18:00 CEST, visit DSM's webinar channel <https://www.brighttalk.com/channel/12499/dsm>.

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Vitamins in Motion

Vitamins play an essential role for health, wellness and disease prevention throughout the lifecycle. They are key to solving our global nutritional challenges. DSM, a global leader in health and nutrition science, is leading an initiative - Vitamins in Motion - to highlight the important role of vitamins. The campaign advocates for increased access, through innovative solutions, to the essential vitamins all people need to be healthy and well-nourished. To learn more, visit www.vitaminsinmotion.com.

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