



Thursday, April 22, 8:00 – 10:30 am US Eastern Time

## Session 8 – COVID-19: Nutritional Vulnerabilities and Food Supply Challenges

Session Co-Chairs: **Philip Calder**, PhD, University of Southampton, United Kingdom and **Geoffry Smith**, Nutrition Strategies International Pte. Ltd., Singapore

**Biography:** Mr. Geoffry Smith is President of ILSI Southeast Asia Region based in Singapore and was a Member of the Executive Committee of the global ILSI Board. In addition, he is the Chairman of the Essential Micronutrients Foundation, a non-profit organization which addresses micronutrient deficiencies globally as a public health issue. He is also Director of Nutrition Strategies International which deals with food and nutrition issues in developing countries. In addition, he serves as a Member of the editorial board of the journal, Food and Nutrition Bulletin. Prior to his current positions, Mr. Smith was the Global Director, Health Chelates for Akzo Nobel Functional Chemicals, and directed the global business for these compounds in food and nutrition as well as pharmaceutical applications. He was responsible for the global project within Akzo Nobel addressing iron deficiency anemia. In addition, Mr. Smith directed the Asia Pacific activities for Akzo Nobel's Innovation Unit. He is a thirty-year veteran of the chemical industry in the Asia Pacific and has resided in Singapore for more than 20 years. He is a Member of the Nutrition Society of the UK, the American Society of Nutrition and the American Chemical Society.



**Biography:** Philip Calder is Professor of Nutritional Immunology in the Faculty of Medicine, University of Southampton. He is an internationally recognized researcher on the metabolism and functionality of fatty acids, with an emphasis on the roles of omega-3 fatty acids, and on the influence of diet and nutrients on the immune and inflammatory responses. His research addresses both life course and translational considerations and includes research in cell and animal models and in healthy humans and patients.



1. **Control of Viral Infection: what is the Role of Nutrition?** **Philip Calder**, PhD, University of Southampton, United Kingdom

**Abstract:** This presentation will provide an overview of anti-viral immunity and will go on to discuss the roles of frailty, obesity and specific nutrients on anti-viral immunity. Nutrients discussed will include vitamin D, vitamin C, zinc and selenium. Evidence will be mainly draw from research in humans.



**Biography:** **Philip Calder** is Professor of Nutritional Immunology in the Faculty of Medicine, University of Southampton. He is an internationally recognized researcher on the metabolism and functionality of fatty acids, with an emphasis on the roles of omega-3 fatty acids, and on the influence of diet and nutrients on the immune and inflammatory responses. His research addresses both life course and translational considerations and includes research in cell and animal models and in healthy humans and patients.



## 2. **Aging and Immunity, Tamas Fülöp**, PhD, University of Sherbrooke, Canada

**Abstract:** There are many physiological changes that come with aging. One of the most important changes to occur is in the immune system, which is referred to as immunosenescence. Immunosenescence affects both arms of the immune response: the innate and the adaptive immune response. During this presentation, I will describe how aging affects the phenotypes and the functions of the cells of the immune system. I will also discuss the mechanisms leading to these alterations. The corollary of this immunosenescence is inflammaging, which represents a low grade, clinically silent, chronic inflammatory state. The clinical importance of these immune alterations will also be presented.

**Biography:** **Tamas Fülöp**, MD, PhD, is Professor of Medicine and Geriatrics, and Senior Researcher at the Research Center on Aging at the University of Sherbrooke, Québec, Canada. He obtained his MD degree at Geneva University. He received his PhD in Biochemistry and Immunology from the Hungarian Academy of Sciences and was a post-doctoral fellow at University Paris XII in Biochemistry. He is a fellow of the Canadian Academy of Health Sciences. Dr. Fülöp's research is focused on immune response changes in T cells and neutrophils and the mechanism of inflammation with aging and age-related diseases in humans, including dementia and cardiovascular diseases. He is the editor-in-chief of the journal *Gerontology*.



## 3. **Dietary Fibers and Immunity, Paul de Vos**, PhD, University Medical Center Groningen, The Netherlands

**Abstract:** By development of new analytical and cellular approaches to characterize dietary fibers and its effects, we are more than ever able to identify efficacious immune regulating carbohydrates. These efforts have shown in recent years that not all carbohydrates have the same effects in different age classes and health disorders. Efficacy depends on the chemistry of the carbohydrates and can be helpful in the continuous fight against mucosal infectious agents.



**Biography:** The **de Vos-group** based at the University Medical Center Groningen, The Netherlands is multidisciplinary and composed of immunologists, polymer-chemists, and endocrinologists. Research efforts go from basic knowledge of carbohydrates, microorganisms to stimulation of pattern-recognition receptors and related immunological properties. More than 270 peer-reviewed manuscripts have published by the de Vos-group. The group is focusing on function-effector relationships between specific carbohydrates and the host immune or endocrine system.



4. **COVID-19 and the Food Supply Chain Disruption**, **Paul Ziemnisky**, MBA, Dairy Management Inc., United States

**Abstract:** This presentation will discuss how the dairy industry has been disrupted in various food supply and service channels due to the COVID-19 pandemic. The author will highlight these channels, such as food service in retail, schools and areas experiencing food insecurity, with examples of disruption and how members of the dairy industry worked together to quickly address it.

**Biography:** **Paul Ziemnisky** is Executive Vice President, Domestic Partnerships, Dairy Management Inc. (DMI). Paul is a senior brand marketing, innovation and general management executive with more than 20 years of consumer package goods marketing, innovation and finance experience in a wide range of industries. Paul's experience includes managing brands and leading innovation for well-known brands such as Kraft, Velveeta, Tombstone, DiGiorno, Rust-Oleum, First Alert and Cats Pride. Paul has guided brands with revenue from \$100 million to over \$1 billion, while launching more than \$500 million of new product platforms. Prior to joining Dairy Management, Paul served in senior-level positions at companies including Kraft Foods, Jarden Safety, Rust-Oleum and Oil-Dri Corporation. In the EVP role, Paul leads DMI's sales growth strategies, fluid milk revitalization program and domestic channel partnership efforts.



- **Panel Discussion with the Speakers**